PathnSitu Biotechnologies

Your Advanced Tissue Pathology Partner

PRODUCT CATALOG 2022-2023

DIAGNOSTIC SOLUTIONS FOR ADVANCED PATHOLOGY

Histology Equipment | Histology Stains

Immunohistochemistry | Immunofluroscence (IF) Antibodies

Tissue Microarray

ISO 13485:2016 FDA REGISTERED GMP CE

www.pathnsitu.com

PREFACE

Dear Valued Customer

We would like to express our sincerest gratitude for the support and trust you have placed in us. We are looking forward to serve you and continue this relationship in the future.

PathnSitu Biotechnologies is a leading manufacturer in the supply of high quality products for tissue based Cancer Diagnosis. Our team consists of world class scientific advisors and hands-on technical advisors that bring over three decades of global tissue diagnostics experience directly to the customer. Employees at PathnSitu are aligned towards a common goal of betterment of human life and thus, ensures holistic care for its employees to provide conducive environment for their performance.

In this year's catalog, we are excited to present 80+ new IHC markers. Along the side, we are thrilled to announce the expansion of our product portfolio which includes IF Antibodies, Histology Equipment & Tissue Microarray. Tissue Microarray is the unique product of PathnSitu which excels the research of end user by minimizing the consumption of reagents and quantify maximum number of samples in one go.

We are One Stop Solution for all your tissue pathology requirements including Histology Equipment, IF Antibodies, Histology Stains and complete end to end solution for Immunohistochemistry (Primary Antibodies, Detection Systems, Buffers, Diluents, Automated Staining Systems etc.) Our team is continuously working towards the development of new clones and antibodies for research and diagnostic use to shape the future of advanced diagnostics to optimize better healthcare.

The company is founded upon a fresh, dynamic perspective that brings energy and motivation to develop quality products for better patient care. We are dedicated towards customer satisfaction through timely delivery of its products with an extraordinary service. Our dedication to your lab will streamline your staining process and reduce the turnaround time, all at affordable pricing. **Our aim is to make cancer diagnosis effective and affordable to all our customers.** Please do visit our website for all time updated products.

Yours Sincerely

Team PathnSitu

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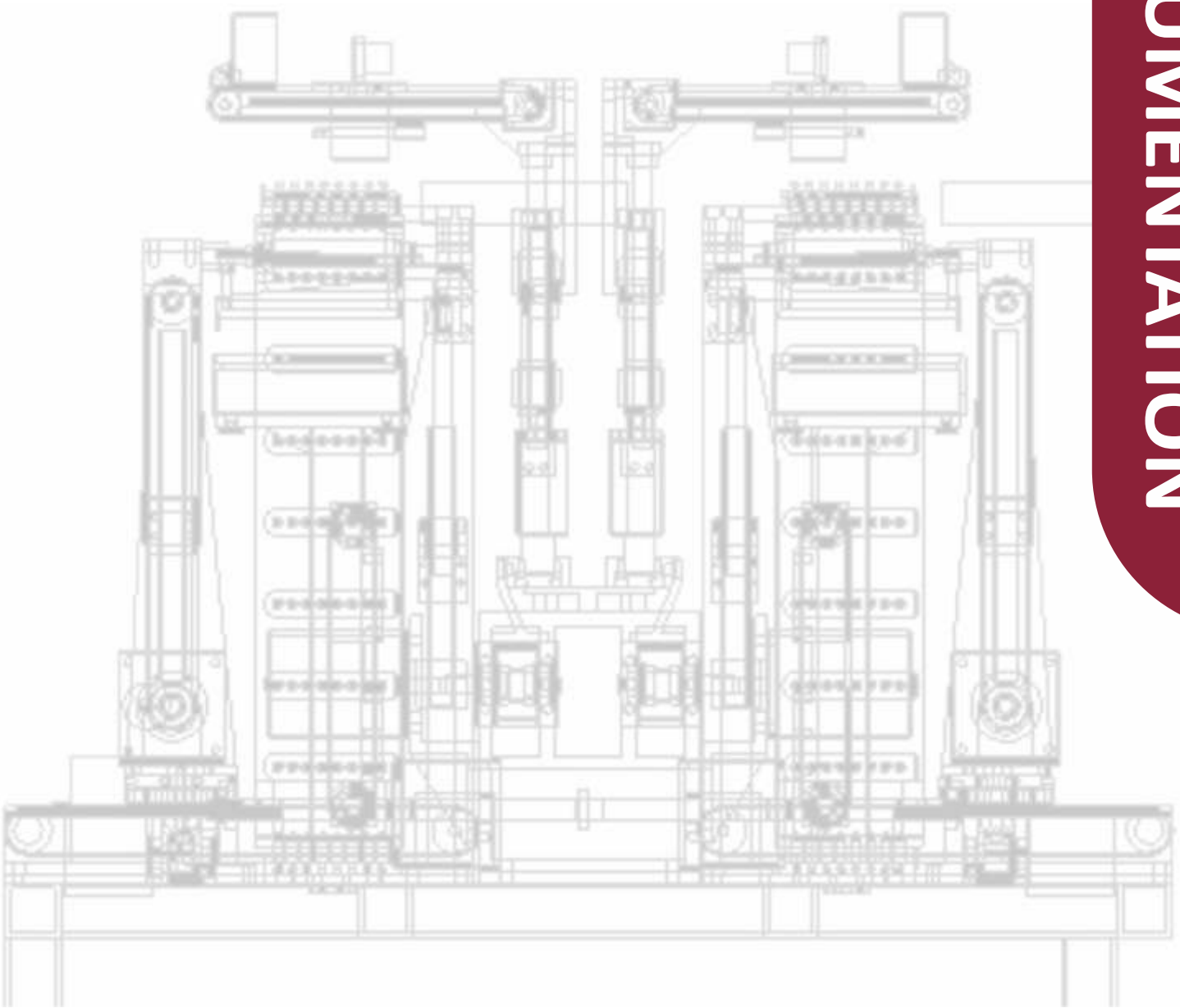


FULLY AUTOMATED IHC STAINING SYSTEM

NEW

Caliber30

PathnSitu's Fully Automated Caliber30 offers the user to complete the IHC staining protocol steps for 30 slides in 4 - 4.5 Hours. The use of Cover Shield Technology and Smaller Footprint helps to minimize the consumption of the reagents and occupies less space in the lab. Caliber30 can help the pathologist to meet the TAT for patient reporting offering faster diagnosis. Caliber30 helps to reduce the user occupancy on the instrument giving them more time to work on other laboratory challenging works. Another important feature is that Caliber30 allows users to connect up to 5 instruments using a single computer making it highly competent and efficient. Self-probe cleaning is an important feature of the instrument where the probe automatically cleans itself to avoid cross contamination. Visual LED Alarms benefit the user by alerting them about any errors, reagent refill requirement, improper placement of reagent bottles etc.

Features

Easy Addition of Reagents

Cover Shield Technology with Min. Consumption of Reagents

Easy Visibility to Check on Refills

Consistent & Quality Staining

3-Independent Racks

Self-Probe Cleaning & On-Board DAB Mixing

Pre-Validated Antibody Protocols

Advantages

- Fully Automated IHC Staining System
- Full Slide Coverage with 120ul
- On Board Antigen Retrieval with Proven Technology
- Elegant Look
- On-Board DAB Mixing
- User Friendly Software
- Additional Storage Cabinet
- End to End Process- Baking to Counterstain
- Single Computer can be Connected to 5 Instruments

Technical Specifications

Process	Fully Automated- Baking to Counterstain
Reagent Capacity	36 Vials
Dispensing Volume	120 ul- Full Slide Coverage
Slide Loading Mode	Three Slide Racks, Continuous Loading
Waste Separation	Yes-Hazardous/Non-Hazardous
DAB Mixing	On-Board
Ancillary Reagent Bottle Capacity	2.5L
Antibody Vial Capacity	6ml
Hazardous Bulk Waste Capacity	2.5L
Bulk Waste Capacity-Non-Hazardous	18L
Slide Capacity	30
Storage Cabinet	1
Dimensions (in mm)	845(L) *770(W) *1430(H)
Working Voltage and Power Frequency	220-240VAC,50Hz, Voltage fluctuation ≤10%
Power Consumption	1000VA
Sound Pressure Level Output (1 meter)	<65dB
Maximum Heat Output	1000VA

Accessories

- Barcode Slide Label Printer
- Hand Held Barcode Scanner
- Computer with Monitor
- UPS (Optional)

Ordering Information
For more information on Caliber30, please reach us at info@pathnsitu.com customerservice@pathnsitu.com

TISSUE PROCESSOR

NEW

Tissue processing comprises of majorly 3 steps (Dehydration, Clearing & Impregnation) using multiple reagents which is required to take an animal/human tissue from fixation to the state where it is completely infiltrated in an appropriate histological wax and can be readily embedded for section cutting using a microtome.

Features

- Capacity of 200+ cassettes holding tissue basket capacity
- Dual Robotic Arm for increased throughput
- Equipped with self-rechargeable battery
- Bright LCD display for easy visibility
- User can set multiprogramming capacity
- User friendly software
- Robust instrument

Ordering Information		
Description	:	**Catalog#**
Tissue Processor	:	PS-TP3S1

Features

- Capacity of 50 cassettes
- Equipped with self-rechargeable battery
- Bright LCD display for easy visibility
- User can set multiprogramming capacity
- User friendly software
- Robust instrument

Ordering Information		
Description	:	**Catalog#**
Tissue Processor	:	PS-TP3A

Technical Specifications

Parameters	Performance (PS-TP3S1)	Performance (PS-TP3A)
Power Voltage	AC 220V-240V	AC 220V-240V
Frequency	50±10%Hz	50±10%Hz
Power	550W	500W
Hydraulic Jar Quantity	14 units (10 Chemical Jars and 4 Paraffin Jars)	12 units (9 Chemical Jars and 3 Paraffin Jars)
Single Jar Volume	2000ml	1000ml
Temperature Presetting Range for Wax Jars	Room temperature to 80ºC	Room temperature to 99ºC
Residual Liquid dropping time while replacing Jar	Approx 30 seconds	Approx 30 seconds
Dimensions (in mm)	1370(L)×440(W)×525(H)	1010(L)×420(W)×450(H)
Total Weight	Approx 102 kg	Approx 67kg

ADVANCED EMBEDDING CENTER & COOLING PLATE

NEW

The paraffin embedding is a common technique in any histology lab. It is the standard method to prepare tissue paraffin blocks for section cutting. This procedure is performed using an embedding center in which the tissues are immersed in paraffin wax using molds, it is then cooled to solidify it so that it provides support for tissue section cutting. This Advanced Embedding Station comes with flexible LED lamp and adjustable magnifier which makes it user friendly to work with smaller specimen/tissues.

Ordering Information		
Description	:	**Catalog#**
Advanced Embedding Center	:	ADEM-IV
Advanced Embedding Center with Advanced Cooling Plate	:	PS-ADECL
Advanced Cooling Plate	:	ADCL-IV

Features

- Additional LED light source for better specimen visibility
- Adjustable magnifying glass for better visibility
- Can heat up quickly and uniform
- Adjustable programmable protocols and week schedules
- Auto memorized protocols
- Convenient foot switch operations for ease of use
- Easy to clean
- Lowest temperature of the cooling platform is 0-~16°C±3°C
- Wide cooling platform

Technical Specifications

Parameters	Embedding Center	Cooling Plate
Temperature Range	Ambient~85°C ± 2°C	0-~16°C±3°C
Size: Paraffin Tank Capacity Left and Right Thermal Chamber Size Embedding Area	 5 Liters 240×160×55 mm 540mm×93mm	 NA
Turn ON/OFF Setting	Present to any minute, any hour and any day in one week	NA
Voltage	AC 220V, 50-60Hz	220-230V, 50~60Hz
Power	1000W	300W
External Dimensions (in mm)	675(L)×575(W)×395(H)	710(L)×350(W)×390(H)
Weight	39 kg	25 kg

EMBEDDING CENTER

NEW

The paraffin embedding is a common technique in any histology lab. It is the standard method to prepare tissue paraffin blocks for section cutting. This procedure is performed using an embedding center in which the tissues are immersed in paraffin wax using molds, it is then cooled to solidify it so that it provides support for tissue section cutting.

Ordering Information		
Description	**:**	**Catalog#**
Embedding Center	:	PS-TES
Embedding Center with Cooling Plate	:	PS-TECL

Features

- Can heat up quickly and uniformly
- User friendly programmable protocols and week schedules
- Auto memorized protocols
- Convenient foot switch operations for ease of use
- Additional light source for better visibility
- Heat resistant granite surface provides the user with large work space
- Easy to clean

Technical Specifications

Temperature Range	55~70°C± 3%
Size:	
Volume of the paraffin tank	2 Liters
Size of mold/cassette storage bin (Left & Right)	225×145×55mm
Size of the embedding area	180×120mm
Voltage	AC 220V, 50-60Hz
Power	650W
External dimensions (in mm)	525(L)×550(W)×385(H)
Weight	Approx 28 kg

COOLING PLATE

NEW

The paraffin embedding is a common technique in histology lab. It is the standard method to prepare tissue paraffin blocks for section cutting. This procedure is performed using an embedding center in which the tissues are immersed in paraffin wax using molds, it is then cooled to solidify it so that it provides support for tissue section cutting.

Ordering Information		
Description	:	**Catalog#**
Cooling Plate	:	PS-COL

Features

- The lowest temperature of the cooling platform is ~ - 25°C ±3°C.
- Wide cooling platform can hold upto 80 cassettes.

Technical Specifications

Lowest Working Temperature	~ - 25°C ±3°C
Size	320×300mm
Voltage	AC 220v ±10%v, 50Hz±1Hz
Power	300W
Weight	25 kg

MICROTOME

NEW

Microtome (PS2260) is a manually operated microtome where tissue sections are cut by turning the handwheel. The guiding lines for the vertical and horizontal movement of the specimens are seamless and free from maintenance. The sections of paraffin embedded block are cut by turning the handwheel. The handwheel should be moved in clockwise direction for tissue block section cutting. The tissue section thickness can be adjusted by a knob (Thickness adjustment knob).

Bull's eye Leveller is a unique feature of this microtome which helps the user to check if the clamp is set in the centre. Tissue sectioning is a very important step in histology as any change in the recommended tissue thickness can lead to improper viewing under the microscope.

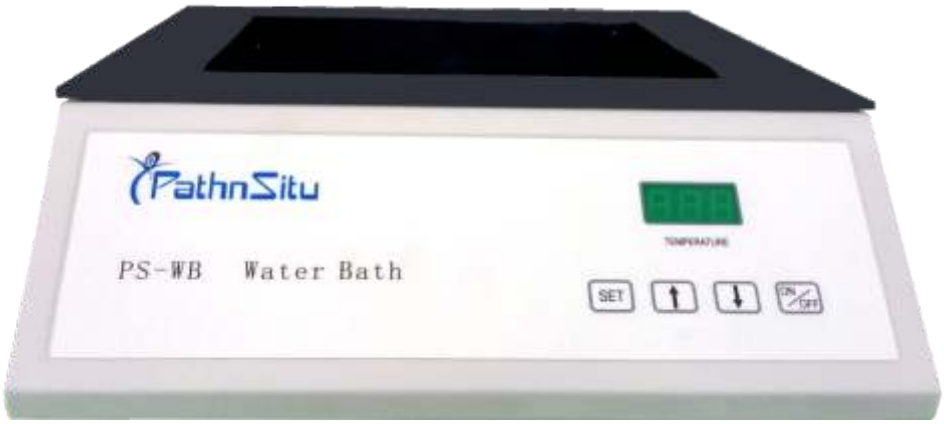
Ordering Information		
Description	**:**	**Catalog#**
Microtome-Manual	:	PS2260

Technical Specifications

Model	PS2260 (Manual Rotary Microtome)
Sectioning thickness setting	Section thickness setting range: 0-60µm
Setting values of thickness	From 0 µm-10 µm in 1µm increments From 10µm-20µm in 2µm increments From 20µm-60µm in 5µm increments
Minimum Setting for Sectioning Thickness	1µm
Total Horizontal Specimen Feed	29mm
Vertical Specimen Stroke	60mm
Movement Range of the Base of Blade Holder Base	0-60mm (front to back)
Movement Range of the Blade Press plate	0-23mm
Maximum Specimen Size	60×70mm
Specimen Orientation	XY – 8°
Precision	±1%
Dimensions (in mm)	570(L)×440(W)×290(H)
Net weight	28kg
Appurtenances	
Direction for specimen adjustment	Up/Down and Right/Left
Forward/Backward	±65mm
Left/Right	±40mm

WATER BATH

NEW



Water bath or Tissue Flotation bath is an important step after cutting the paraffin sections and before the sections are placed on the slides. It allows the tissue section to smoothen out before they are taken on the glass slide. Water bath ensures removal of any minor wrinkles and folds that are formed before placing them on the slide. The PS-WB Model water bath comprises of a surface that provides uniform heat transmission. The temperature can be selected between the room temperature and 90°C.

Ordering Information		
Description	:	**Catalog#**
Water Bath	:	PS-WB

Features

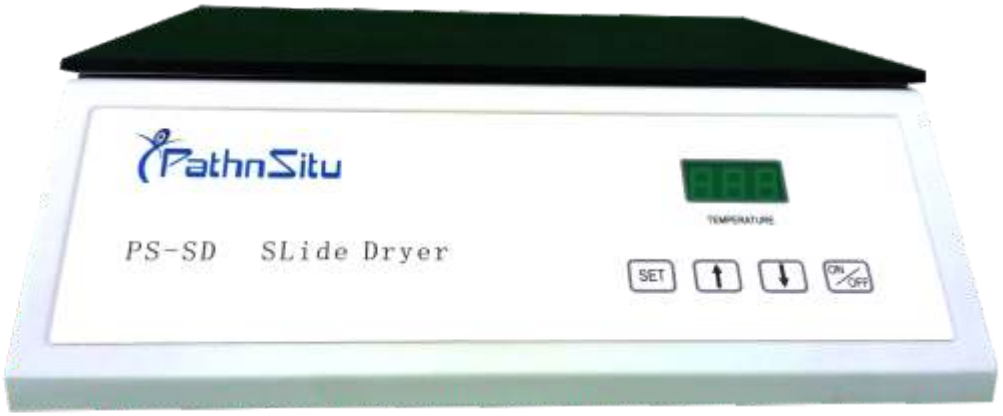
- Provides high and quick heat transmission
- Precise in temperature
- Programmable temperature settings
- Bright LED digital display
- Built-in battery backup system for memorized settings
- Black surface provides good visibility to identify the tissue sections
- Easy to clean and maintain

Technical Specifications

Capacity	1.5 litres
Temperature range	Room temperature to 90°C ± 2°C
Working Voltage	AC220V / 50~60Hz
Dimensions (in mm)	350(L)x340(W)x120(H)
Net Weight	5kg

SLIDE DRYER

NEW



Slide Dryer or Slide warming table is generally used for slide baking. The step of slide baking is where the FFPE tissue slides after the sectioning are baked/heated using dry heat to improve the adhesion of tissue sections to the slide.

Ordering Information		
Description	:	**Catalog#**
Slide Dryer	:	PS-SD

Features

- It provides quick heat transmission on the plate surface
- Maintains precise and uniform temperature
- User friendly set temperature with LED display
- Black surface of the plate provides clear visibility of the tissue sections
- Wide surface of hotplate can accommodate around 35 slides

Technical Specifications

Size of heating plate	340 × 360mm
Temperature set range	Room temperature to 90°C ± 2°C
Voltage	AC 220±10% 50Hz
Power	200W
Dimensions (in mm)	350(L)×340(W)×120(H)
Net Weight	5kg

MULTI EPITOPE RETRIEVAL SYSTEM (MERS i)

NEW

Multi Epitope Retrieval System is designed to perform optimal antigen retrieval triggered by heat under pressure. The customized one touch retrieval programs are validated in house for Immunohistochemistry (IHC). It has unique features like Delayed Start, Temperature Display and Digital Count down. User safety is our top priority and MERS is designed with double protection technology to ensure safe release of excess pressure. The built-in fully digital default programs in MERS makes it a revolutionary walkaway system with feature highlighting the On Demand Pressure cycle for your tenacious antibodies for diagnostics or research. The optimal temperature and pressure fasten the antigen retrieval process and yields consistent staining.

Ordering Information

Description	:	Catalog#
MERS	:	MERS i
Staining Jars	:	SJ001
Slide Rack	:	SR001
Stand	:	ST001

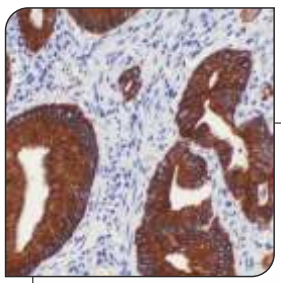
Auxiliary Products

Description	:	Catalog#
Citrate Buffer	:	PS007
EDTA Buffer	:	PS008
Tris - EDTA Buffer	:	PS009

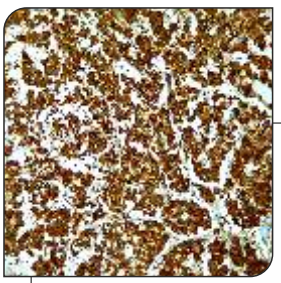
Features

- Pressure Based Walkaway System
- One Touch Digital Default Programs
- 24 Hour Delayed Start
- On Demand Pressure Cycles
- Multiple Protocols in a Single Run
- High throughput up to 72 slides in a Single Run
- Temperature Display

MERS i

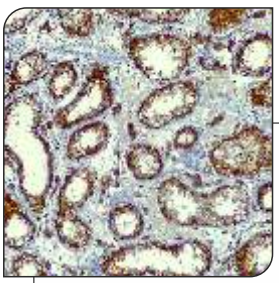


Colon Ca stained with CKAE1/AE3



Pituitary stained with ACTH

BPH stained with Prostein



Testis stained with Inhibin

Technical Specifications

Voltage	220-230V AC, 50-60Hz
Power Consumption	900W
Dimensions (in inches)	15(L)×8.5(W)×10.5(H)
Gross Weight(approx)	6.20 Kg

DEPARAFFINIZATION AND STAINING STATION

NEW

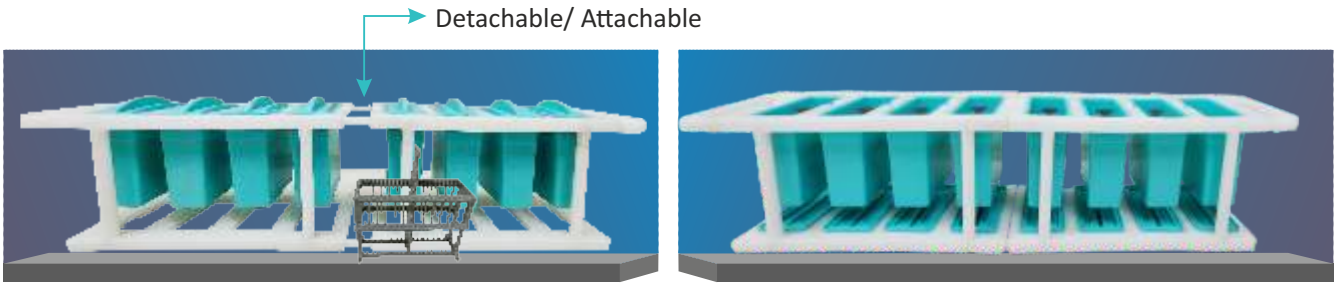
Uniquely designed manual staining station is ideal for high throughput staining(s) like H&E, PAP Stain, Dehydration& Rehydration and all Histology Stains. The jars of the staining station are resistant to xylene and alcohols. Due to the narrowed mouth of jars, it saves up to 60% of reagent usage when compared to conventional glass jars. These high-quality solvent resistant jars hold approx. 250-275 ml of reagent. The station comes with 4 jars with respective lids and solvent resistant slide rack(s) with precise slide holding slots for 24 slides. The staining station is designed to hold the lids at the bottom of each jar to prevent mixing and/or losing them. The unique feature of this stand is that the user can add multiple staining stands to the existing one allowing the user to create their own stand as per the requirement. The linear staining station is compact and can fit in small areas. The durable material used in the frame gives an extra strength and sustains rough handling. It has been designed to save on reagent costs and helps in reducing the cost per slide.

Ordering Information		
Description	**:**	**Catalog#**
Deparaffinization & Staining Station (4 jars)	:	SC004
Deparaffinization & Staining Station (8 jars)	:	SC008

4 Jars Staining Station Includes	
Staining Jars including Lids	: 4 Nos
Slide Rack	: 4 Nos
Stand (Upper Frame & Lower Frame)	: 2 Nos
Supporting Legs	: 4 Nos

Features

- Compact, Tough Plastic Stand can be extended to maximum length
- Allows the user to connect multiple sets of staining stands to the existing one
- Solvent Resistant Jars
- Each Jar holds upto 275ml of Solution
- Minimum Consumption with Less Evaporation
- Designed for Histologytology Stains
- Deparaffinization, Dehydration and Rehydration



Technical Specifications

Body Type	Plastic
Size (in cms) - Jars 4 capacity	33.5(L)×13.8(W)×14.1(H)
Weight - Jars 4 capacity	1.6kg~1.8kg / 3.5lb~3.9lb

MULTIPURPOSE STAINING CHAMBER

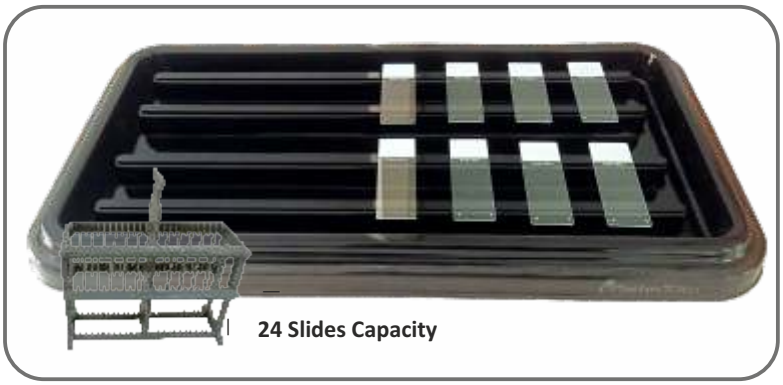
NEW

The multipurpose staining chamber is suitable for various slide staining protocols. The dark colour lid supports for light sensitive stains which are mainly used in immunohistochemistry, immunocytochemistry, immunofluorescence techniques etc. The chamber contains 4 raised rails to hold upto 24 slides and prevent the interference from the drain/waste from washings. The design allows to stack-up multiple racks to avoid space constrains.

Ordering Information		
Description	**:**	**Catalog#**
Slide Chamber	:	ST024-B

Features

- Can be stackable for multiple staining protocols
- Can act as a humid chamber
- Suitable for light sensitive stains
- Can hold upto 24 slides



24 Slides Capacity

Technical Specifications

Body Type	Plastic
Size	46×25×4cms
Slide Capacity	24

DENATURATION AND HYBRIDIZATION SYSTEM

PathnSitu's Denaturation and Hybridization System is specially equiped with humid chambers where the uniform distribution of temperature and relative humidity is maintained throughout the hybridization process. The slide slots and removable slide divider were designed for easy operation and aids in proper cleaning in case of any spillage.The lid temperature can be turned ON or OFF according to the end user preference. Hermetic heating lid together with the heated water tank assures perfect experiment results with four operation modes -

- Denaturation/Hybridization
- Hybridization
- Custom Programming
- In-situ PCR

Ordering Information	
Description	**: Catalog#**
Hybridizer	: PSH12

Accessories
Humid Chamber (4 Nos)
USB Stick (1 No)
Operator's Manual (1 No)
Mouse (1 No)
Slide Divider (1 No)

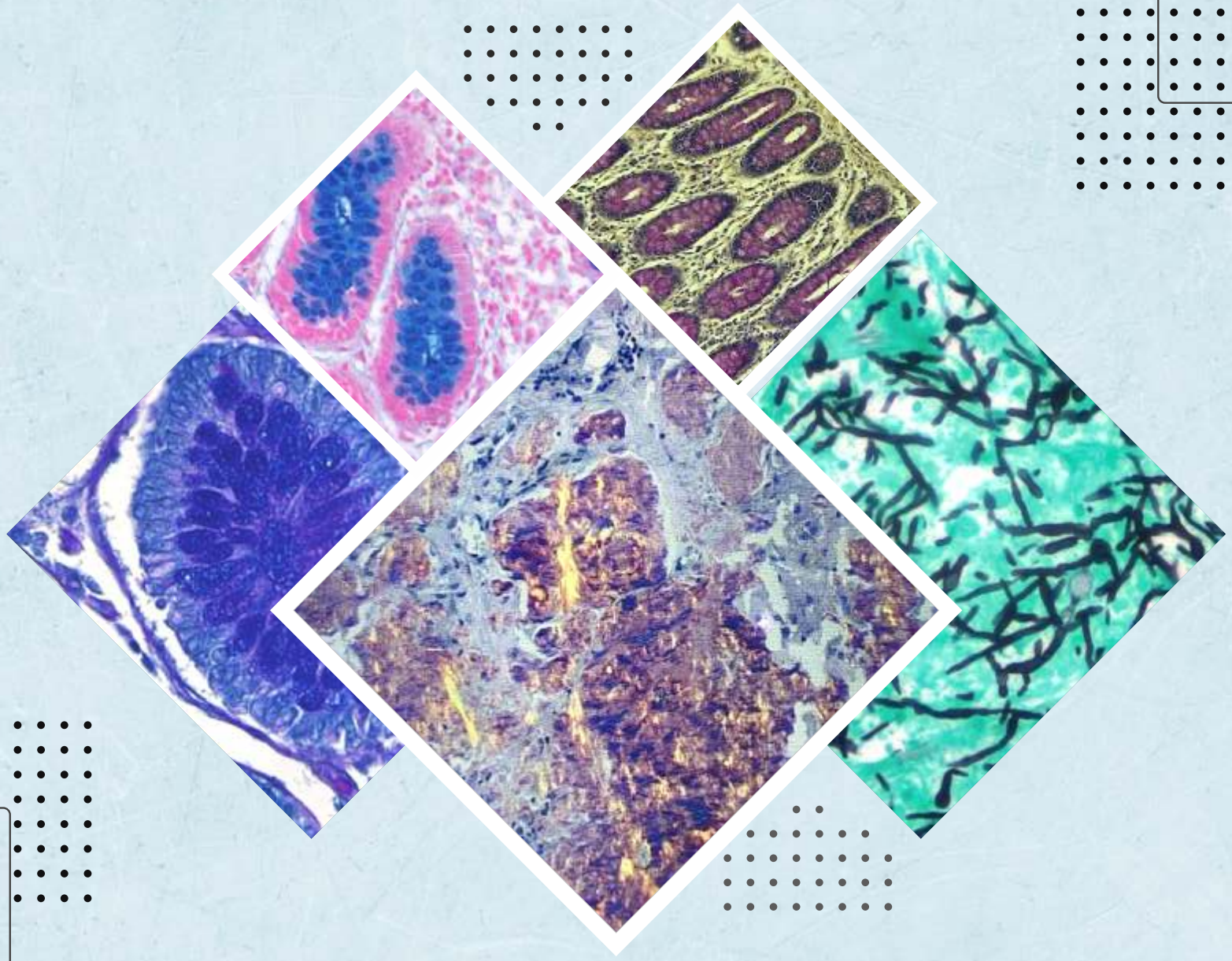
Features

- Touch screen/mouse operating allows easy access and programming
- Heating lid makes the temperature consistent and accurate
- Real-time display for temperature curve
- 60 programmable memory settings
- Data export function

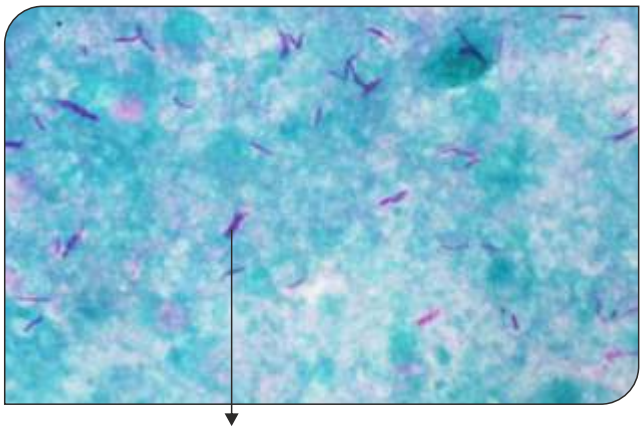
Technical Specifications

Relative humidity	£ 70%
Power supply	AC220V-50-60Hz 2.5A
Temperature control range	RT + 5°C ~ 99.9°C (Add 5°C to RT)
Timing control accuracy	1 min to 99 h 59 min
Temperature control accuracy	£ ± 1°C
Temperature uniformity	£ ± 1°C
Heating time (37°C-95°C)	£ 4 min
Cooling time (95°C-45°C)	£ 8 min
Sample capacity	upto 12 Slides
Max. input power	460 W
Dimensions (in mm)	420(L)x225(W)x143(H)
Net weight (kg)	6.2

SPECIAL STAINS



Acid Fast Bacteria (AFB)



Acid Fast Bacteria - Bright Red

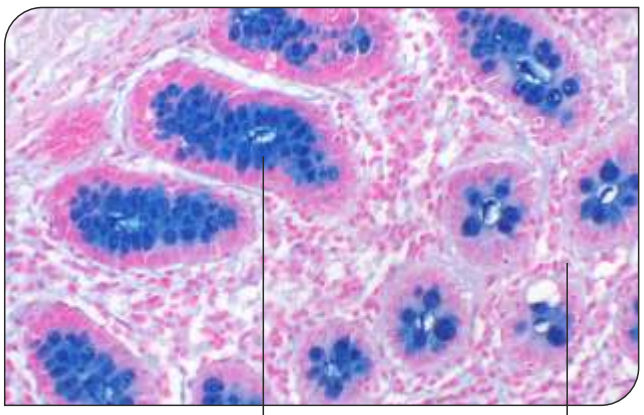
AFB stain is a differential bacteriological stain used to identify acid-fast organisms, mainly Mycobacterium species including M. tuberculosis, M. ulcerans, and M. leprae and non tuberculous Mycobacteria (NTM). The staining method for acid fast bacilli is similar to that of classical bacteriological procedure for smears. The term “acid fast” refers to the capacity of specific bacterial types to bind cationic dyes and to retain these dyes following differentiation in an acidic solution/ decolorizer. The Acid Fast Stain kit when used in the appropriate histological procedures may be used for the detection of Mycobacterium tuberculosis in tissue sections and smears.

PRODUCT INFORMATION

Catalog#	Pack Size
SSP012	100ml Ready to use
SSP012	250ml Ready to use
SSP012	500ml Ready to use

Kit Contents : Carbol Fuchsin (Reagent A), Decolorizer (Reagent B), Light Green (Reagent C)

Alcian Blue



Acidic mucins, Sulphated & Carboxylated Sialomucins, Sulphated & Carboxylated Mucopolysaccharides - Blue

Nuclei - Pink to Red

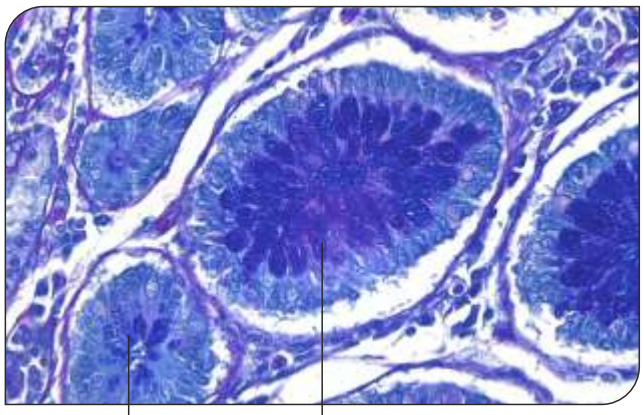
Alcian Blue is a stain that is used to visualize acidic epithelial and connective tissue mucins. Mucins are a type of carbohydrate and are found in the GI tract and respiratory tract. Acidic mucins have a negative charge. The alcian blue dye molecule has a copper-containing pthalocyanine ring linked to four isothiouronium groups which have a positive charge. The dye molecule binds with the sulphur and/or carboxyl groups of the mucin depending on the pH used. The pH will determine which mucins are stained. With a 3% acetic acid solution of pH 2.5 it will stain both sulphated and carboxylated acid mucopolysaccharides and glycoproteins. The blue color of the stain is produced by the copper in the dye molecule. pH 2.5 Alcian blue is used to diagnose Barrett's esophagus, as it will also stain goblet cells. It is also used in mesothelioma, atherosclerosis and adenocarcinomas.

PRODUCT INFORMATION

Catalog#	Pack Size
SSP007	100ml Ready to use
SSP007	250ml Ready to use
SSP007	500ml Ready to use

Kit Contents : Alcian Blue Solution (Reagent A), Nuclear Fast Red Solution (Reagent B)

Alcian Blue-PAS (ABPAS)



Acid Epithelial Mucins - Blue

Mixed Mucins - Purple

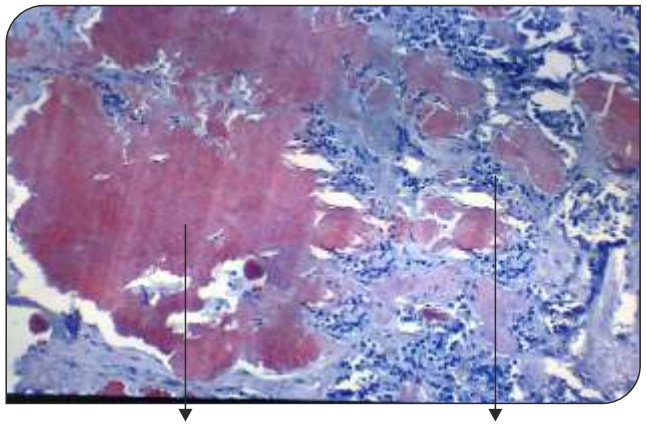
The Alcian Blue/PAS Stain kit is used to identify acidic and neutral mucins. This procedure clearly separates the acidic and neutral mucins by color and can be used to distinguish all mucins in tissue sections. The 3% acetic acid solution (pH 2.5) with alcian blue is believed to form salt linkages with the acid groups of acid mucopolysaccharides. The tissue sections are first oxidized using periodic acid which oxidises the vicinal bonds in these sugars, breaking the carbon-carbon bonds resulting in the pair of aldehydes. The Schiff's reagent reacts with the aldehyde groups forming colorless, unstable dialdehyde compound which transforms to insoluble magenta colored complex by restoration of quinoid chromophoric grouping.

PRODUCT INFORMATION

Catalog#	Pack Size
SSP008	100ml Ready to use
SSP008	250ml Ready to use
SSP008	500ml Ready to use

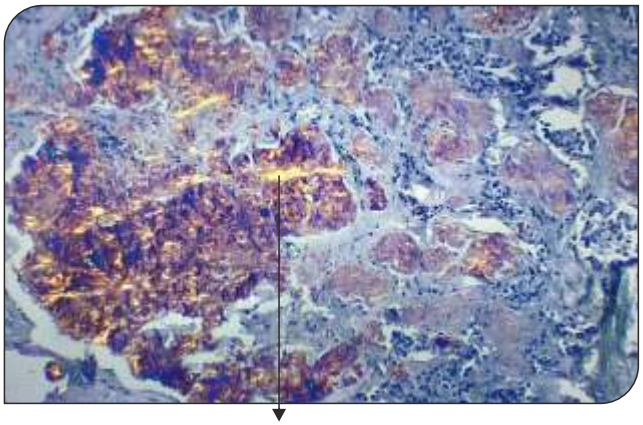
Kit Contents : Alcian Blue Solution (Reagent A), Periodic Acid Solution (Reagent B), Schiff's Reagent (Reagent C), Modified Mayer's Hematoxylin (Reagent D)

Congo Red



Amyloid, Elastin Fibres - Pink to Red

Nuclei - Blue



Amyloidosis shown in Polarized Light (Apple Green)

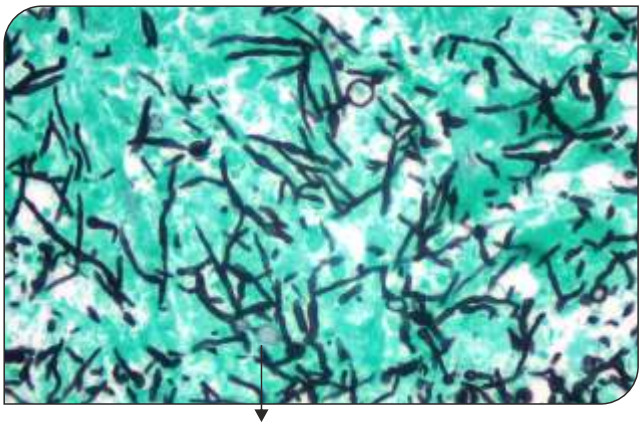
Congo red is a synthetic dye, used for the differential staining of elastic fibers. Congo red histological staining is the gold standard technique for the detection of amyloidosis. It is a dye belongs to a group of azo dyes derived from benzidine and it does not require the application of mordant. Amyloid refers to the abnormal, fibrous extracellular proteinaceous deposits found in organs such as kidney, spleen, liver etc. the deposition of amyloids in the tissue is known as Amyloidosis. In histology, the Congo red is used for staining amyloidosis, other amyloids in cell wall of plants, fungi and outer membrane of Gram Negative bacteria.

PRODUCT INFORMATION

Catalog#	Pack Size
SSP002	100ml Ready to use
SSP002	250ml Ready to use
SSP002	500ml Ready to use

Kit Contents : Congo Red Stock Solution (Reagent A), 1% NaOH (Reagent B), Alkaline Alcohol Solution (Reagent C), Modified Mayer's Hematoxylin (Reagent D)

GMS



Fungi - Black (Sharply delineated)

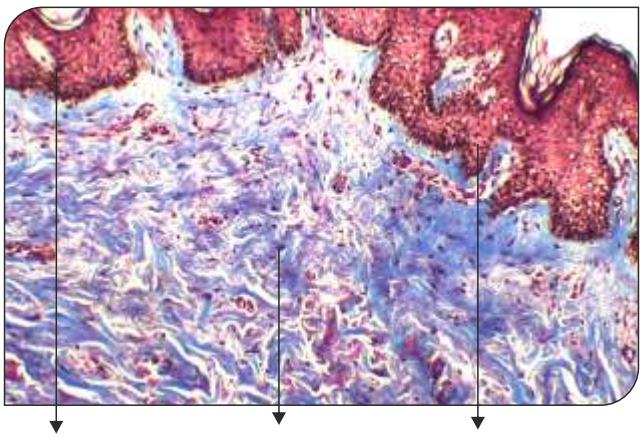
Grocott's Methenamine-Silver Nitrate (GMS Stain) remains a helpful ancillary stain for use on cytopathology specimens in order to help detect infrequent, often miniscule, fungal organisms. GMS reliably stains viable and nonviable fungal organisms and is therefore often the preferred method for identifying pathogenic fungi. The stain is also useful to highlight the distinctive morphologic features of commonly, encountered fungi, including Pneumocystics jiroveci, Cryptococcus, Candida, Histoplasma, Blastomycosis, A spergillus and Mucor. For example: it is intended for use in the histologic visualization of fungi, basement membrane and some opportunistic organisms such as Pneumocystis carinii that causes severe pulmonary diseases.

PRODUCT INFORMATION

Catalog#	Pack Size
SSP011	25 Reaction Ready to use
SSP011	50 Reaction Ready to use

Kit Contents : Chromic acid (Reagent A), Sodium Metabisulphite (Reagent B), Methenamine (Reagent C), Silver Nitrate (Reagent D), Borax (Reagent E), Gold Chloride (Reagent F), Sodium Thiosulphate (Reagent G), Light Green (Reagent H)

Masson's Trichrome



Cell Nuclei - Black | Collagen - Blue | Keratin & Muscle Fibers - Red

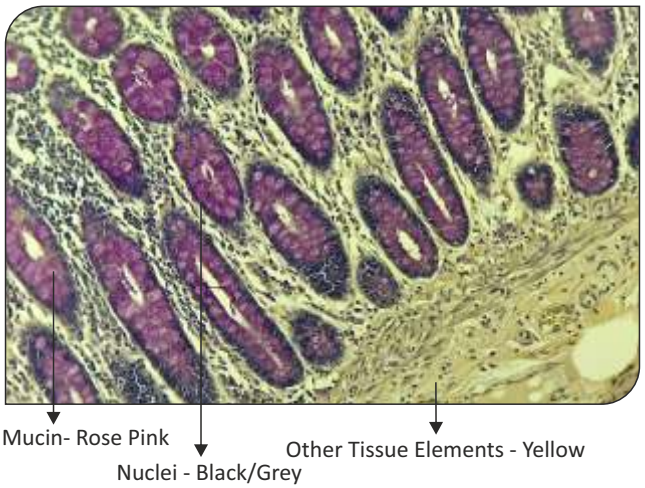
Masson's trichrome staining is widely used to study muscular pathologies (muscular dystrophy), cardiac pathologies (infarct), hepatic pathologies (cirrhosis) or kidney pathologies (glomerular fibrosis). It can also be used to detect and analyze tumors on hepatic and kidney biopsies. In Trichrome staining, three dyes are employed to selectively stain muscle, collagen fibers, fibrin, and erythrocytes.

PRODUCT INFORMATION

Catalog#	Pack Size
SSP009	100ml Ready to use
SSP009	250ml Ready to use
SSP009	500ml Ready to use

Kit Contents : Bouin's Fixative (Reagent A), Weigert's Iron Hematoxylin Solution 1 (Reagent B), Weigert's Iron Hematoxylin Solution 2 (Reagent C), Biebrich Scarlet Acid Fuchsin Solution (Reagent D), Phosphomolybdic and Phosphotungstic Acid Solution (Reagent E), Aniline Blue Solution (Reagent F), 1% Glacial Acetic Acid Solution (Reagent G)

Mucicarmine



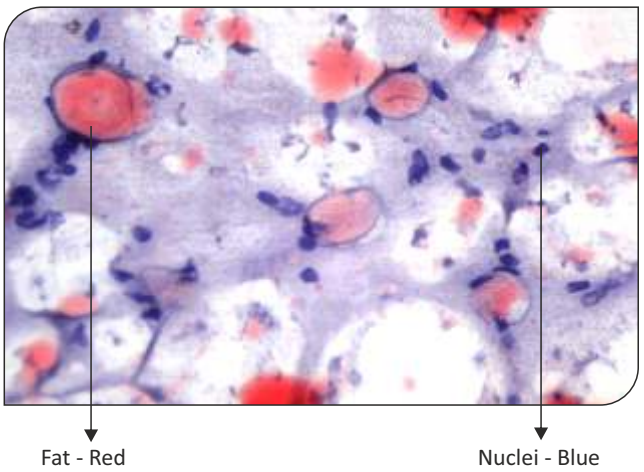
Mucicarmine staining is intended for use in the histological visualization of acid mucopolysacharides in tissue sections. Mucin is a secretion produced by a variety of epithelial cells and connective tissue. Mucicarmine is a valuable technique for the evaluation of acid mucins particularly those of the gastrointestinal tract. In addition, this technique is also useful for staining the capsule of the fungus Cryptococcus neoformans. The mucicarmine staining technique is also useful for determining the site of a primary tumor by visualizing tumor cells producing mucin in an area not containing mucin-producing cells.

PRODUCT INFORMATION

Catalog#	Pack Size
SSP010	100ml Ready to use
SSP010	250ml Ready to use
SSP010	500ml Ready to use

Kit Contents : Carmine Stock Solution (Reagent A), Weigert's Iron Hematoxylin Solution -1 (Reagent B), Weigert's Iron Hematoxylin Solution -2 (Reagent C), Metanil Yellow (Reagent D)

Oil Red O



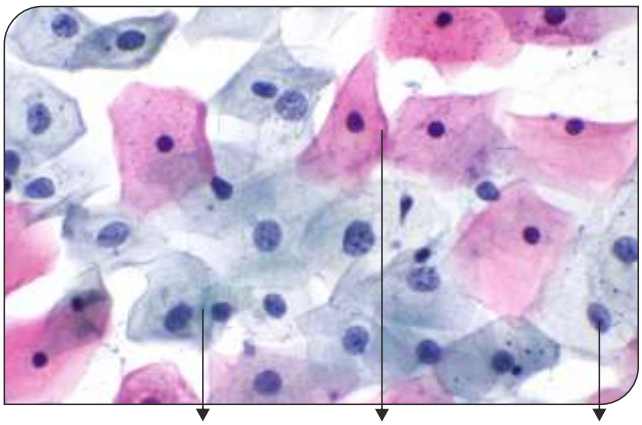
Oil Red O is an oil-soluble dye. Oil-soluble dyes exhibit greater solubility of the dye in lipid substances in the tissue. Oil Red O is used to demonstrate neutral fats in liver tissue. Excess lipid accumulated in peripheral tissues is a key feature of many metabolic diseases. Therefore, techniques for quantifying lipids in various tissues are important for understanding and evaluating the overall metabolic status. The method allows for easy estimation of tissue lipid content and its distribution in the tissue.

PRODUCT INFORMATION

Catalog#	Pack Size
SSP015	100ml Ready to use
SSP015	250ml Ready to use
SSP015	500ml Ready to use

Kit Contents : Oil-Red-O (Reagent A), Harris Hematoxylin (Reagent B)

Papanicolaou (PAP)



PAP Stain (also known as Papanicolaou's Stain) is a polychromatic stain mostly utilised in the practice of Cytopathology. Papanicolaou's stain contains multiple dyes to differentiate cells in smears of various bodily secretions and specimens from fine needle aspirations. It is a polychrome staining method which depends on degree of cellular maturity and cellular metabolic activity. The stain is designed to differentiate variety of cells in vaginal smear to detect vaginal, uterine and cervical cancers.

PRODUCT INFORMATION

(Catelog# : With Modified Mayer's Hematoxilin)

Catalog#	Pack Size
SSP001	100ml Ready to use
SSP001	250ml Ready to use
SSP001	500ml Ready to use
SSP001	1 Ltr Ready to use

PRODUCT INFORMATION

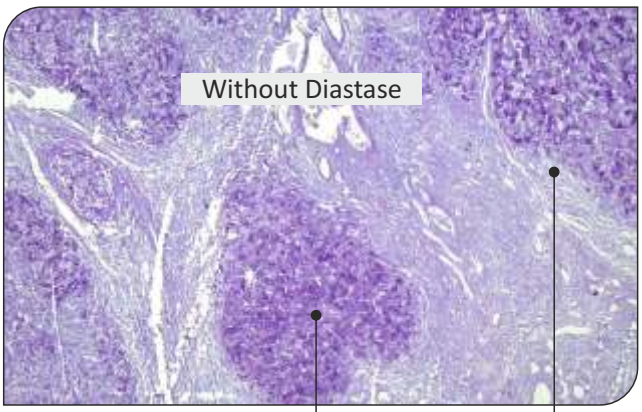
(Catelog# : With Harris Hematoxylin)

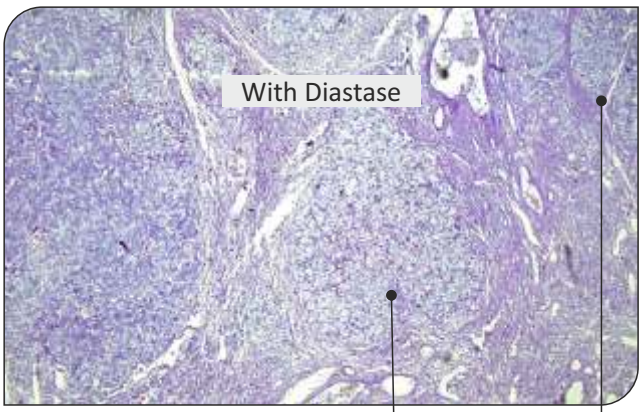
Catalog#	Pack Size
SSP005	100ml Ready to use
SSP005	250ml Ready to use
SSP005	500ml Ready to use
SSP005	1 Ltr Ready to use

Kit Contents: Modified Mayer's Hematoxylin (Reagent A), Orange G6 (Reagent B), EA50 (Reagent C)

Kit Contents: Harris Hematoxylin (Reagent A), Orange G6 (Reagent B), EA50 (Reagent C)

PAS-Diastase





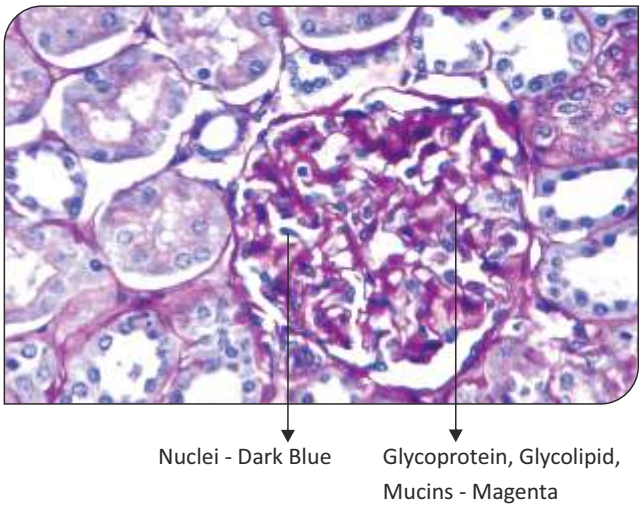
PAS-Diastase stain refers to the Pas stain used in combination with diastase enzyme to differentiate glycogen from PAS positive elements in tissue samples.The PAS with Diastase staining procedure can also be used to differentiate glycogen granules from other granules in various tumor types. Mucin can be specifically identified in certain tissue samples using the PAS staining procedure only if the glycogen (which is also PAS positive) is digested with diastase and washed out. In cirrhosis, a1-AT globules characteristically occur at the periphery of the nodules in multiple sizes within the hepatocyte gives a dark, reddish-purple when stained with PAS-diastase as glycogen is digested by diastase.

PRODUCT INFORMATION

Catalog#	Pack Size
SSP006	100ml Ready to use
SSP006	250ml Ready to use
SSP006	500ml Ready to use

Kit Contents : Diastase Solution (Reagent A), Periodic Acid (Reagent B), Schiff's Reagent (Reagent C), Modified Mayer's Hematoxylin (Reagent D)

Periodic Acid Schiff (PAS)



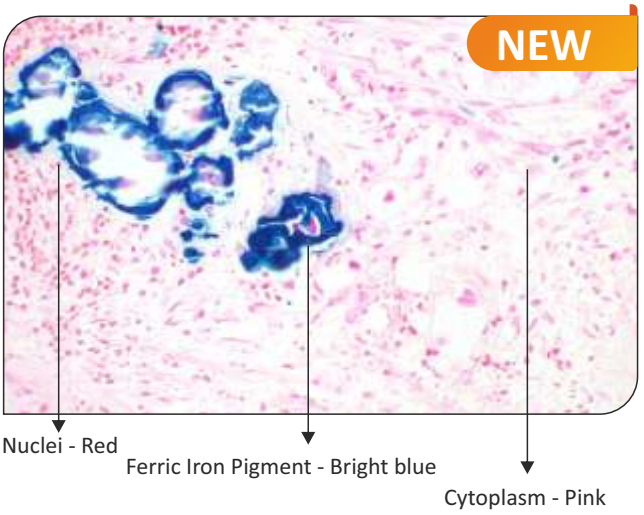
Periodic acid Schiff's (PAS) staining is one of the most commonly performed special staining technique in histology to detect the polysaccharides or molecules with high percentage of carbohydrate content such as glycogen and mucosubstances such as glycoproteins, glycolipids and mucins in tissues. Additionally, it is intended to demonstrate lymphocytes in tissues. The PAS stain is also used for the detection of fungal organisms in tissue sections.

PRODUCT INFORMATION

Catalog#	Pack Size
SSP003	100ml Ready to use
SSP003	250ml Ready to use
SSP003	500ml Ready to use

Kit Contents : Periodic Acid (Reagent A), Schiff's Reagent (Reagent B), Modified Mayer's Hematoxylin (Reagent C)

PERL'S Prussion Stain



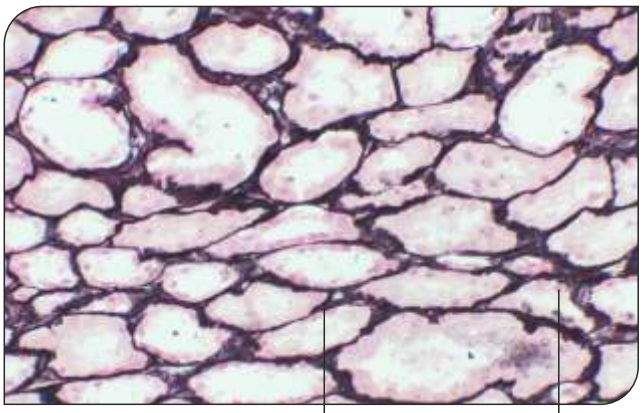
The reagents in this kit are intended for Laboratory use only. Perl's stain method is considered to be the first classical histochemical reaction to demonstrate iron especially in tissues such as bone marrow, spleen. This procedure is particularly helpful to evaluate pathologist conditions that involve haemonsiderin deposits. In addition to haemorrhage, this can occur in conditions such as haemochromatosis (where excessive amounts of iron may form in organs due to iron overload), some liver diseases, and in the lungs of patients with congestive heart failure.

PRODUCT INFORMATION

Catalog#	Pack Size
SSP020	100ml Ready to use
SSP020	250ml Ready to use
SSP020	500ml Ready to use

Kit Contents : Potassium Ferro-Cyanide Aqueous (Reagent A), Glacial Acetic Acid Aqueous (Reagent B), Nuclear Fast Red (Reagent C)

Reticulin



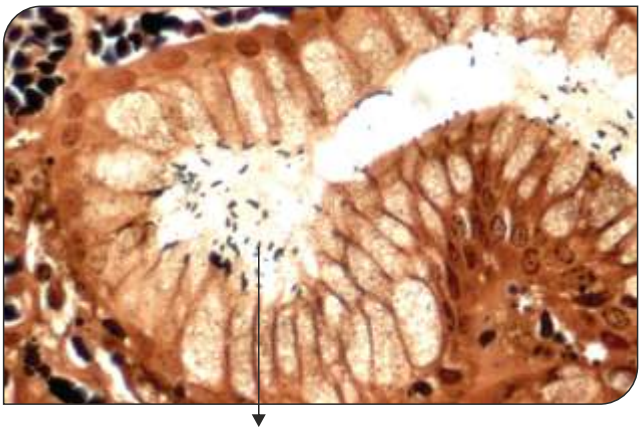
Reticular tissue is a special type of connective tissue that predominates in various locations that have a high cellular content. to the arrangement of reticular fibers (reticulin). These fibers are actually type III collagen fibrils. Reticulin stain is a commonly used special stain to demonstrate reticulin fibers. Reticulin is a type III collagen found in the basement membrane of many organs and provides structural integrity. It is found commonly in the liver, kidneys and the spleen.

PRODUCT INFORMATION

Catalog#	Pack Size
SSP013	100ml Ready to use
SSP013	250ml Ready to use
SSP013	500ml Ready to use

Kit Contents : Potassium Permanganate (Reagent A) Oxalic Acid (Reagent B), Iron Alum (Reagent C), Silver nitrate (Reagent D), Sodium Hydroxide (Reagent E), Gold Chloride (Reagent F), Sodium Thiosulphate (Reagent G), Nuclear Fast Red (Reagent H)

Warthin Starry



Warthin Starry stain is the best staining technique to detect spirochetes (such as Helicobacter, Leptospira, Borrelia, and Treponema species), as well as small bacilli (including Campylobacter, Bartonella, and Legionella species). Numerous staining techniques have been concocted to identify H.pylori in histological sections but their sensitivity and specificity vary significantly. To enhance the detection of the presence of low density organisms, special staining techniques like Warthin-Starry is required. The identification is relatively much easier with the Warthin-Starry method because the silver coating makes the organism appear larger.

PRODUCT INFORMATION

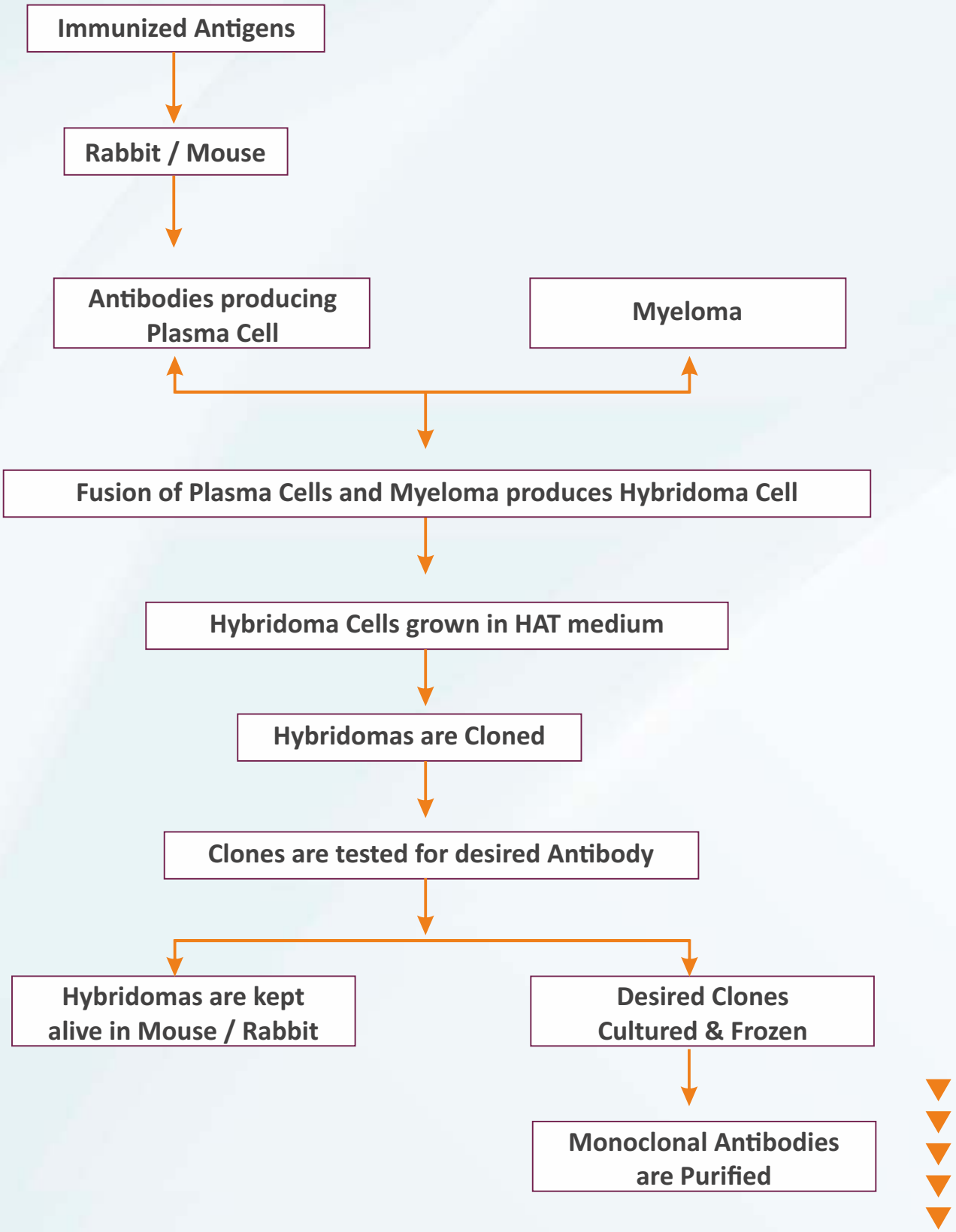
Catalog#	Pack Size
SSP014	100ml Ready to use
SSP014	250ml Ready to use
SSP014	500ml Ready to use

Kit Contents : Acidulated Silver Nitrate (Reagent A), Acidulated Silver Nitrate (Reagent B) , Acidulated Gelatin (Reagent C), Acidulated Hydroquinone (Reagent D), Tartrazine (Reagent E)

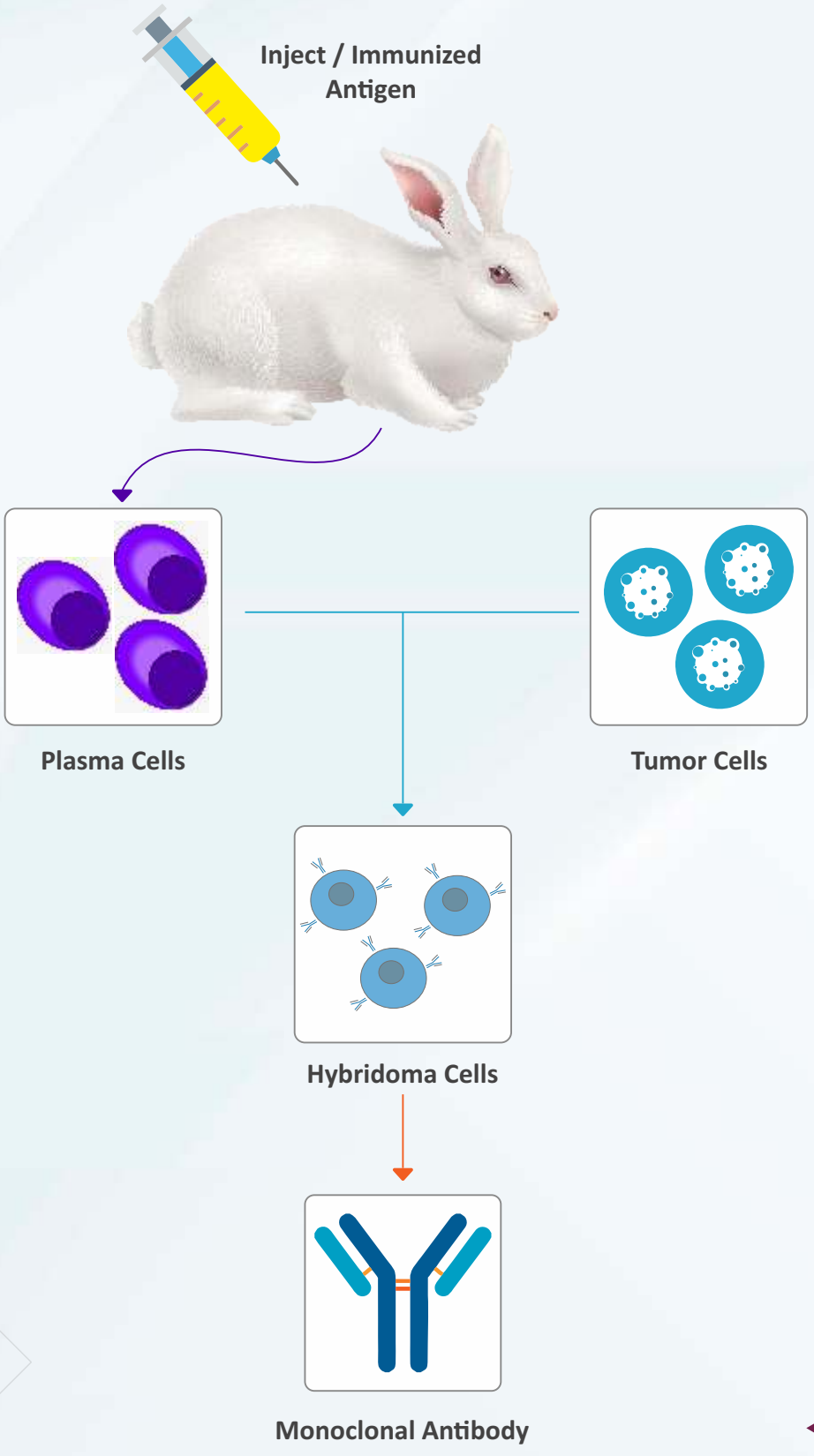
Staining Interpretation

Special Stains	Staining Interpretation	Special Stains	Staining Interpretation
AFB	**Acid Fast Bacilli:** Bright Red **Other Tissue Elements:** Pale Green	**Oil Red O**	**Neutral Fat:** Orange - Bright Red **Nuclei:** Blue
Alcian Blue	**Nuclei: Pink to Red** **Acid Mucins: Blue** **Cytoplasm: Pale Pink**	**PAS-Diastase**	**Mucins:** Magenta **Nucleus:** Purple or Dark Blue **Glycogen:** Digested and not stained
Mucicarmine	**Nuclei: Grey/Black** **Mucin: Rose Pink** **Other Tissue Elements: Yellow**	**Alcian Blue-PAS (ABPAS)**	**Acid Epithelial Mucins: Blue** **Neutral Epithelial Mucins: Magenta** **Mixed (Acid & Neutral) Mucins: Purple**
GMS	**Fungi: Black (Sharply delineated)** **Background: Pale Green**	**Reticulin**	**Nuclei: Red/Pink** **Reticulum: Black**
Masson's Trichrome	**Nuclei: Black** **Cytoplasm: Red** **Muscle Fibers: Red** **Collagen Fibers: Blue**	**PAS**	**Nuclei: Dark Blue** **Mucin: Magenta** **Glycogen: Magenta** **Fungi: Magenta** **Basement Membrane: Magenta**
Congo Red	**Nuclei: Dark Blue** **Amyloid** **In Transmitted Light: Pink to Red** **In Polarized Light: Apple green Birefringence** **Connective Tissue, Collagen: Light Red**	**PAP**	**Nuclei:** Blue **Keratinized Cells:** Orange **Superficial Cells:** Pink **Erythrocytes:** Dark pink **Parabasal Cells:** Greenish blue **Intermediate Cells:** Greenish blue **Metaplastic Cells:** May be greenish blue and pink
PERL's Prussion Stain	**Ferric Iron Pigment: Bright Blue** **Nuclei: Red** **Cytoplasm: Pink**	**Warthin Starry**	**Helicobacter pylori: Black** **Other Tissue Elements: Pale Yellow**

MONOCLONAL ANTIBODY GENERATION



MONOCLONAL ANTIBODY GENERATION



PRIMARY ANTIBODIES

We are continuously moving towards the development of new clones and antibodies for research and diagnostic use to shape the future of advanced diagnostics to optimize better healthcare.

Our major strength is Rabbit Monoclonal antibodies which are highly specific and sensitive. PathnSitu offers both Rabbit & Mouse Monoclonal, Rabbit Polyclonal antibodies in 3ml, 6ml Ready to use (RTU) and High affinity (HA); 0.1ml, 0.5ml, 1ml in Concentrated (Conc.).

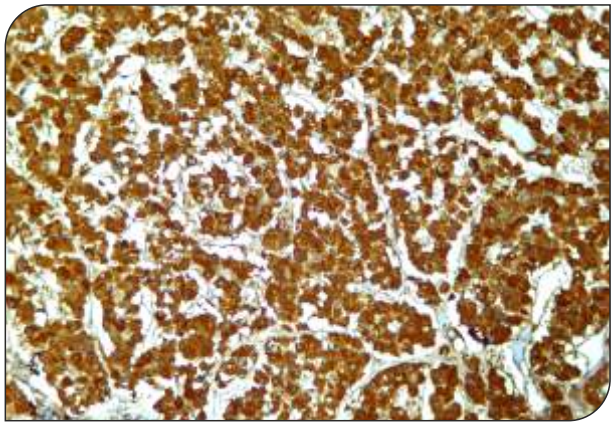
PR = Primary Rabbit Monoclonal
PM = Primary Mouse Monoclonal
PP = Primary Rabbit Polyclonal

HAR = High Affinity Rabbit Monoclonal
HAM = High Affinity Mouse Monoclonal
HAP = High Affinity Rabbit Polyclonal

CR = Concentrated Rabbit Monoclonal
CM = Concentrated Mouse Monoclonal
CP = Concentrated Rabbit Polyclonal

Mouse Monoclonal Anti-Human

ACTH-AH26+57



Pituitary gland stained with Anti-ACTH

Clone	:	AH26+57
Isotype	:	Mouse IgG1k
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Pituitary gland

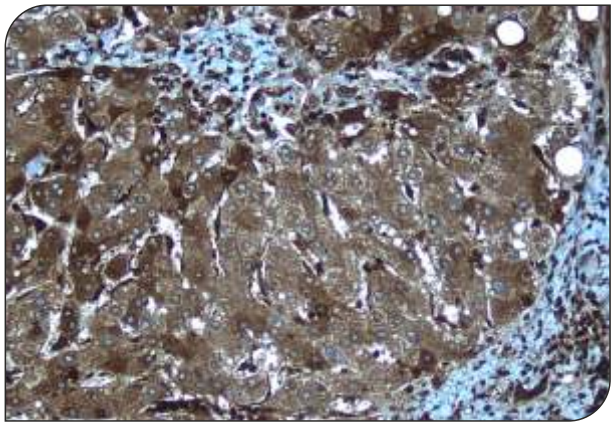
Catalog#	Catalog#	Catalog#
PM205-3ml (RTU)	PM205-6ml (RTU)	—
HAM205-3ml (RTU)	HAM205-6ml (RTU)	—
CM205-0.1ml (Conc)	CM205-0.5ml (Conc)	CM205-1ml (Conc)

C

ACTH (same as Corticotropin) is a 39 amino acid active peptide produced by the anterior pituitary. This antibody is specific to Synacthen (aa1-24 of ACTH); does not react with CLIP (aa17-39 of ACTH). POMC (pro-opiomelanocortin or corticotropin-lipotropin) is a 267 amino acid polypeptide hormone precursor that goes through extensive, tissue specific post translational processing by convertases. POMC is cleaved into ten hormone chains named NPP, ACTH, alpha-MSH (Melanocyte Stimulating Hormone), beta-MSH, gamma-MSH, CLIP (corticotropin like intermediary peptide), Lipotropin-beta, Lipotropin-gamma, beta-endorphin and Met-enkephalin. ACTH is also produced by cells of immune system (T-cells, B-cells, and macrophages) in response to stimuli associated with stress. Anti-ACTH is a useful marker in classification of pituitary tumors and the study of pituitary disease. It reacts with ACTH producing cells (corticotrophs). It also may react with other tumors (Eg. some small cell carcinomas of the lung) causing paraneoplastic syndromes by secreting ACTH.

Rabbit Monoclonal Anti-Human

Alpha-1-Antichymotrypsin-EP384



Liver stained with Anti-Alpha-1 Antichymotrypsin

Clone	:	EP384
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Breast Ca, Liver

Catalog#	Catalog#	Catalog#
PR278-3ml (RTU)	PR278-6ml (RTU)	—
HAR278-3ml (RTU)	HAR278-6ml (RTU)	—
CR278-0.1ml (Conc)	CR278-0.5ml (Conc)	CR278-1ml (Conc)

TE

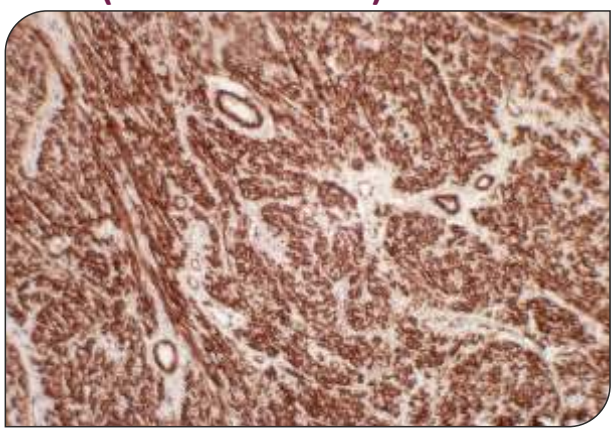
Alpha-1-Antichymotrypsin is an acute phase glycoprotein that functions by inhibiting proteases secreted by neutrophils and mast cells during periods of inflammation. It is primarily produced by hepatocytes and locally expressed in histiocytes, including macrophages and kupffer cells in the liver. Alpha-1-Antichymotrypsin is a useful marker for malignant fibrous histiocytomas to aid in differentiating from other soft tissue tumors such as liposarcomas or Ewing's sarcoma.

E -EDTA BUFFER

TE -TRIS-EDTA BUFFER

C -CITRATE BUFFER

Mouse Monoclonal Anti-Human
Actin (Smooth Muscle) -1A4



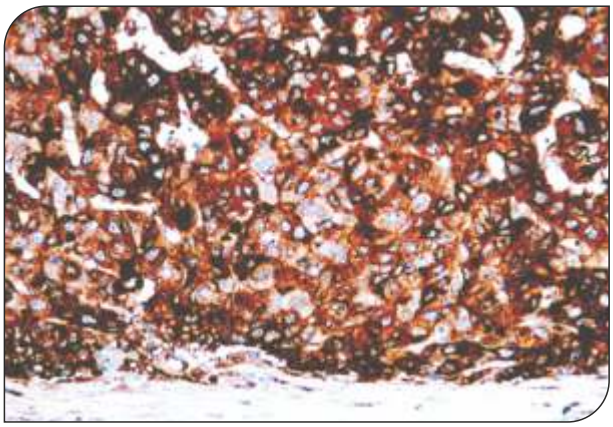
Uterus stained with Anti-Actin

Clone	:	1A4
Isotype	:	Mouse IgG2a
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Gastrointestinal Tract, Uterus, Colon, Leiomyoma

Catalog#	Catalog#	Catalog#
PM077-3ml (RTU)	PM077-6ml (RTU)	—
HAM077-3ml (RTU)	HAM077-6ml (RTU)	—
CM077-0.1ml (Conc)	CM077-0.5ml (Conc)	CM077-1ml (Conc)

TE This antibody recognizes Actin isotypes alpha of smooth muscle and those cells with myofibroblast differentiation. It labels smooth muscular cells, myofibroblasts, and myoepithelial cells. Using this antibody with other myogenic markers such as muscle actin, desmin and vimentin will be very helpful for differentiation of tumor from muscle origin. It is a useful marker for the identification for soft tissue tumors with muscle differentiation, i.e. leiomyomas and leiomyosarcomas. It is a useful marker for distinction benign proliferative lesions of the breast from neoplastic proliferations.

Rabbit Monoclonal Anti-Human
AFP-EP209



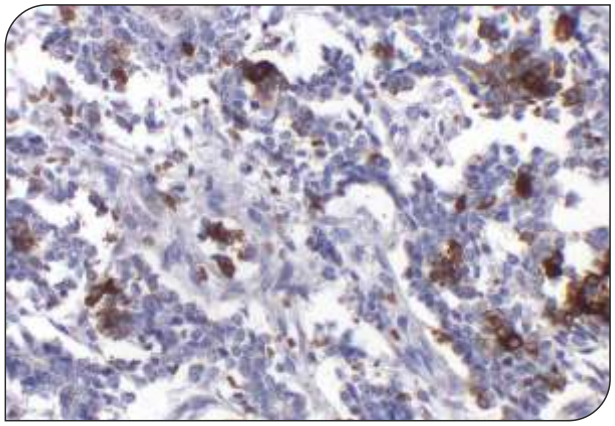
Hepatocellular Ca stained with Anti-AFP

Clone	:	EP209
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Hepatocellular Ca, Fetal Liver, Yolk Sac Tumor

Catalog#	Catalog#	Catalog#
PR001-3ml (RTU)	PR001-6ml (RTU)	—
HAR001-3ml (RTU)	HAR001-6ml (RTU)	—
CR001-0.1ml (Conc)	CR001-0.5ml (Conc)	CR001-1ml (Conc)

TE Alpha-fetoprotein (AFP) is the most abundant plasma protein found in the human fetus. It is thought to be the fetal form of serum albumin. AFP binds to copper, nickel, fatty acids and bilirubin and is found in monomeric, dimeric, and trimeric forms. Alpha-Fetoprotein is synthesized by the cells of the embryonic yolk sac, fetal liver and fetal intestinal tract. AFP levels decrease soon after birth. In abnormal tissues, expression of AFP has been demonstrated in hepatocellular carcinoma, hepatoid adenocarcinoma, germ cell tumors and particularly yolk sac tumor. The anti-AFP antibody may be useful for the identification of neoplastic liver diseases, yolk sac tumors and mixed germ cell tumors.

Rabbit Polyclonal Anti-Human
AFP-Polyclonal



Fetal liver stained with Anti-AFP

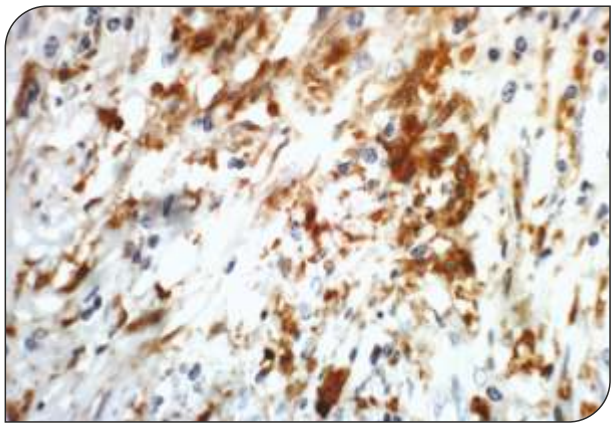
Clone	:	Polyclonal
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Fetal Liver, Hepatocellular Ca, Yolk Sac Tumor

Catalog#	Catalog#	Catalog#
PP215-3ml (RTU)	PP215-6ml (RTU)	—
HAP215-3ml (RTU)	HAP215-6ml (RTU)	—
CP215-0.1ml (Conc)	CP215-0.5ml (Conc)	CP215-1ml (Conc)

TE

AFP is normally synthesized in the liver, intestinal tract, and yolk sac of the fetus. Antibody to AFP has been shown to be useful in detecting hepatocellular carcinomas (HCC) and germ cell neoplasm, especially yolk sac tumors.

Rabbit Monoclonal Anti-Human
ALDH1A1-EP168



Breast Ca stained with Anti-ALDH1A1

Clone	:	EP168
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Embryonal Liver, Breast Ca, Kidney

Catalog#	Catalog#	Catalog#
PR236-3ml (RTU)	PR236-6ml (RTU)	—
HAR236-3ml (RTU)	HAR236-6ml (RTU)	—
CR236-0.1ml (Conc)	CR236-0.5ml (Conc)	CR236-1ml (Conc)

TE

ALDH1A1 belongs to the aldehyde dehydrogenase family. Aldehyde dehydrogenase is the next enzyme after alcohol dehydrogenase in the major pathway of alcohol metabolism. There are two major aldehyde dehydrogenase isozymes in the liver, cytosolic and mitochondrial, which are encoded by distinct genes, and can be distinguished by their electrophoretic mobility, kinetic properties, and subcellular localization. ALDH1A1 has been a well established marker of hematopoietic stem cells and progenitor cells. Recent studies also show that ALDH1A1 is an important cancer stem marker associated with tumor progression in cancers of the breast, prostate and lung. This antibody labels epithelial cells of the stomach, liver, kidney and thyroid, neural cells and stromal cells including endothelial cells. In tumors, it stains stromal cells as well as tumor cells in many types of cancers.

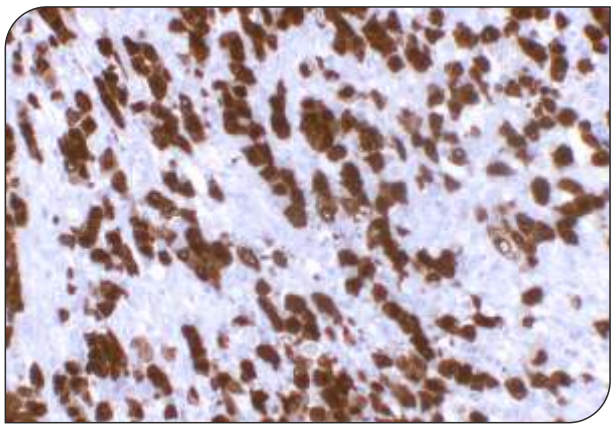
E-EDTA BUFFER

TE-TRIS-EDTA BUFFER

C-CITRATE BUFFER

Rabbit Monoclonal Anti-Human
ALK-EP302

TE C



ALCL stained with Anti-ALK

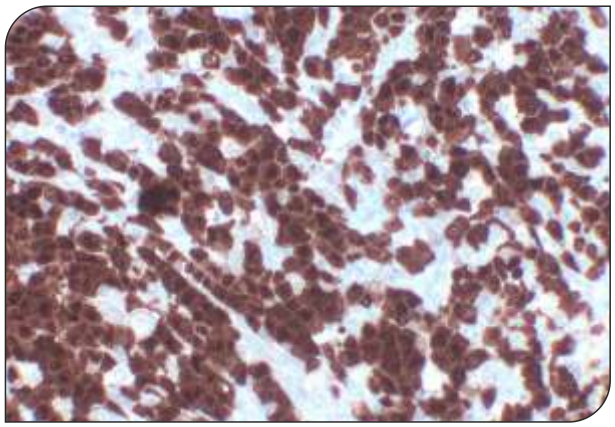
Clone	:	EP302
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm and Nucleus
Control	:	Anaplastic Large Cell Lymphoma (ALCL)

Catalog#	Catalog#	Catalog#
PR224-3ml (RTU)	PR224-6ml (RTU)	—
HAR224-3ml (RTU)	HAR224-6ml (RTU)	—
CR224-0.1ml (Conc)	CR224-0.5ml (Conc)	CR224-1ml (Conc)

Anaplastic lymphoma kinase (ALK) is a receptor tyrosine kinase of the insulin receptor superfamily. ALK is typically expressed at low levels in regions of the developing central and peripheral nervous system. ALK may be activated in cancer through multiple mechanisms. The most common mechanism is through formation of a fusion protein from chromosomal translocations, as in the case of anaplastic large cell lymphoma (ALCL) and inflammatory myofibro-blastic tumors. ALK may also be amplified through mutation, as in neuroblastomas. Various solid tumors, such as non-small cell lung carcinoma (NSCLC) and brain cancers were also found to aberrantly express ALK. ALK staining is present within both the nucleus and cytoplasm, and are positive in about 60% of ALCL. ALK protein expression by tumor cells is an independent prognostic factor that predicts a favorable outcome.

Mouse Monoclonal Anti-Human
ALK-1A4

TE



ALCL stained with Anti-ALK

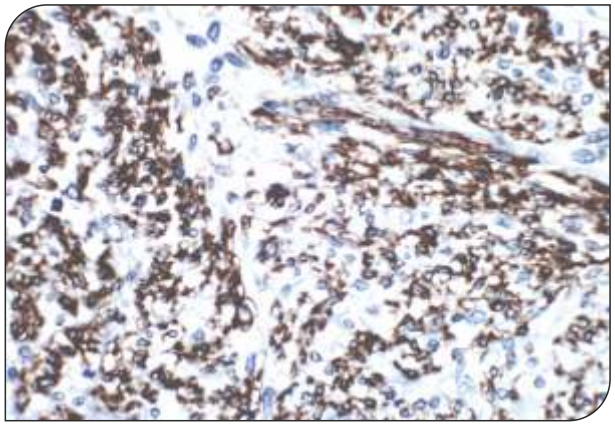
Clone	:	1A4
Isotype	:	Mouse IgG2b
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm and Nucleus
Control	:	Anaplastic Large Cell Lymphoma (ALCL)

Catalog#	Catalog#	Catalog#
PM158-3ml (RTU)	PM158-6ml (RTU)	—
HAM158-3ml (RTU)	HAM158-6ml (RTU)	—
CM158-0.1ml (Conc)	CM158-0.5ml (Conc)	CM158-1ml (Conc)

This gene encodes a receptor tyrosine kinase, which belongs to the insulin receptor superfamily. This protein comprises an extracellular domain, an hydrophobic stretch corresponding to a single pass transmembrane region, and an intracellular kinase domain. It plays an important role in the development of the brain and exerts its effects on specific neurons in the nervous system. This gene has been found to be rearranged, mutated, or amplified in a series of tumors including anaplastic large cell lymphomas, neuroblastoma, and nonsmall cell lung cancer.

The chromosomal rearrangements are the most common genetic alterations in this gene, which result in creation of multiple fusion genes in tumourigenesis, inclu-ding ALK (chromosome 2)/EML4 (chromosome 2), ALK/RAN-BP2 (chromosome 2), ALK/ ATIC (chromosome 2), ALK/TFG (chromosome 3), ALK/ NPM1 (chromosome 5), ALK/ SQSTM1 (chromosome 5), ALK/KIF5B (chromosome 10), ALK/CLTC (chromosome 17), ALK/TPM4 (chromosome 19), and ALK/MSN (chromosome X).

Rabbit Monoclonal Anti-Human
Alpha Actin (Smooth Muscle)-EP188



Smooth Muscle stained with Anti-Alpha Actin

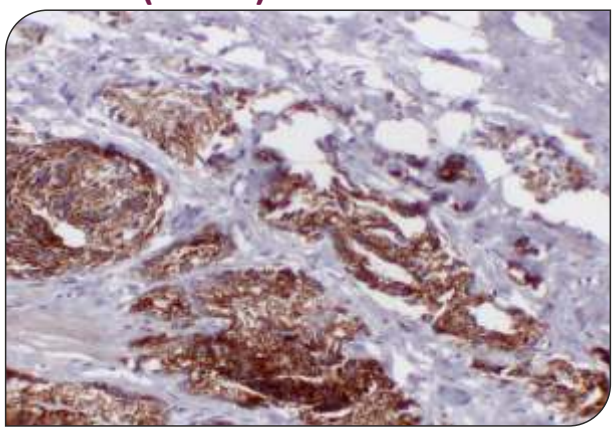
Clone	:	EP188
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Smooth Muscle, Colon, Leiomyoma

Catalog#	Catalog#	Catalog#
PR003-3ml (RTU)	PR003-6ml (RTU)	—
HAR003-3ml (RTU)	HAR003-6ml (RTU)	—
CR003-0.1ml (Conc)	CR003-0.5ml (Conc)	CR003-1ml (Conc)

C

Actins are a major component of the cytoskeleton ubiquitously expressed in all eukaryotic cells. Although actin is one of the most conserved eukaryotic proteins, six isoforms characterized by isoelectric point and amino acid sequence analysis. Four of them represent differentiation markers of muscle tissues and two are found practically in all cells. These six different actin isoforms share 90% sequence homology throughout the entire molecule, but each has a unique sequence in the first 18 residues at the amino terminus. These actins are thought to be involved in the maintenance of contractile activity and other cellular function. Anti-Alpha-Actin (Smooth Muscle) antibody recognizes smooth muscle actin, no cross reaction with cardiac or skeletal muscle actin and other non-muscle actins.

Rabbit Monoclonal Anti-Human
AMACR (P504S)-13H4



Prostate Ca stained Anti-AMACR

Clone	:	13H4
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Prostate Ca

Catalog#	Catalog#	Catalog#
PR078-3ml (RTU)	PR078-6ml (RTU)	—
HAR078-3ml (RTU)	HAR078-6ml (RTU)	—
CR078-0.1ml (Conc)	CR078-0.5ml (Conc)	CR078-1ml (Conc)

C

AMACR (P504S) is an essential enzyme in the b-oxidation of branched-chain fatty acids. Recently, AMACR (P504S) was identified through cDNA library subtraction and microarrays in malignant prostate tissues. High expression of AMACR (P504S) protein is found in prostatic adenocarcinoma but not in benign prostatic tissue by immunohistochemical staining in paraffin embedded tissues.

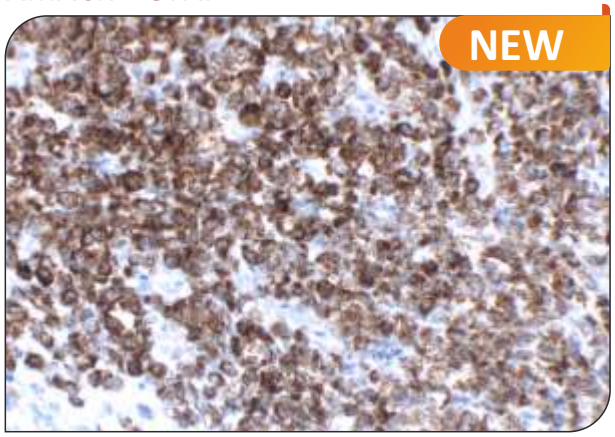
The expression of AMACR (P504S) is also detected in two premalignant lesions of the prostate: high-grade prostatic intraepithelial neoplasia (PIN) and atypical adenomatous hyperplasia. Using AMACR (P504S) as a positive marker along with basal cell staining (34bE12 or P63) as a negative marker could help to confirm the diagnosis of small focus of prostate carcinoma on needle biopsy.

E -EDTA BUFFER

TE -TRIS-EDTA BUFFER

C -CITRATE BUFFER

Rabbit Monoclonal Anti-Human
AMACR-BOFAP



Prostate Ca stained with Anti-AMACR

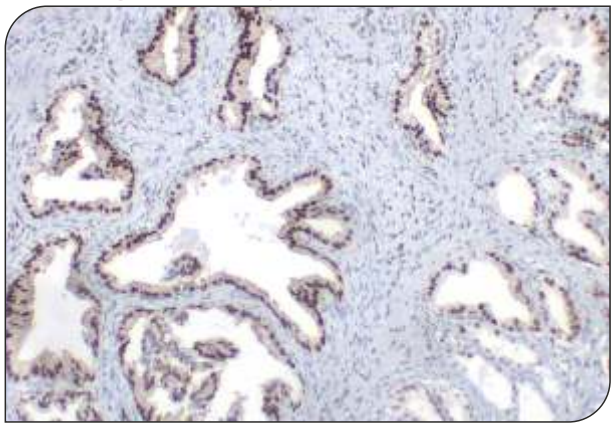
Clone	:	BOFAP
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Prostate Ca

Catalog#	Catalog#	Catalog#
PR349-3ml (RTU)	PR349-6ml (RTU)	—
HAR349-3ml (RTU)	HAR349-6ml (RTU)	—
CR349-0.1ml (Conc)	CR349-0.5ml (Conc)	CR349-1ml (Conc)

TE

Alpha-methylacyl-CoA racemase (AMACR), also known as p504s, is a mitochondrial and peroxisomal enzyme that is involved in bile acid biosynthesis and beta-oxidation of branched-chain fatty acids.AMACR is essential in lipid metabolism, and is expressed in normal liver (hepatocytes), kidney (tubular epithelial cells) and gall bladder (epithelial cells). Expression has also been found in lung (bronchial epithelial cells) and colon (colonic surface epithelium). In immunohistochemistry (IHC), AMACR antibody has been shown to be a specific marker of prostatic adenocarcinoma.

Rabbit Monoclonal Anti-Human
Androgen Receptor-EP120



BPH stained with Anti-Androgen Receptor

Clone	:	EP120
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Benign Prostate Hyperplasia (BPH), Prostate Ca

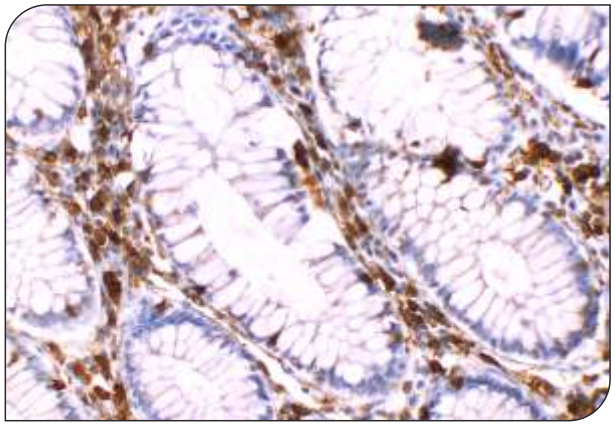
Catalog#	Catalog#	Catalog#
PR002-3ml (RTU)	PR002-6ml (RTU)	—
HAR002-3ml (RTU)	HAR002-6ml (RTU)	—
CR002-0.1ml (Conc)	CR002-0.5ml (Conc)	CR002-1ml (Conc)

C

Androgen receptor (AR) is a member of the steroid receptor superfamily that is essential for the growth of prostate cancer cells. AR antibody labels epithelial cells and stromal cells in normal prostate. AR reactivity is also found in other types of cells, including epithelial cells of the breast and hepatocytes.

In prostate cancer, AR expression is maintained throughout cancer progression. Immunohistochemistry of is useful for the evaluation of prostate cancer AR in routinely processed tissues. The majority of androgen independent hormone refractory prostate cancers express AR. Transcriptional activation of AR is involved in refractory anti-androgen therapy. Androgen receptor expression has been helpful in predicting the clinical response to anti-androgenic treatment.

Mouse Monoclonal Anti-Human
Annexin A1-BSB-95



Colon stained with Anti-Annexin A1

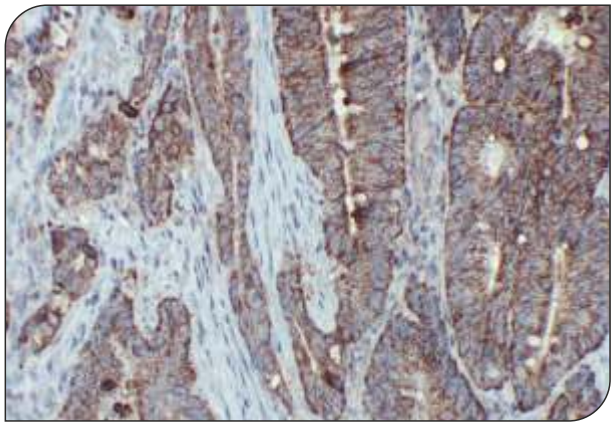
Clone	:	BSB-95
Isotype	:	Mouse IgG2b
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm and Membrane
Control	:	Tonsil, Spleen, Thymus, Colon

Catalog#	Catalog#	Catalog#
PM291-3ml (RTU)	PM291-6ml (RTU)	—
HAM291-3ml (RTU)	HAM291-6ml (RTU)	—
CM291-0.1ml (Conc)	CM291-0.5ml (Conc)	CM291-1ml (Conc)

TE

The protein Annexin A1 is encoded by the ANXA1 gene, which is upregulated in hairy cell leukemia. The NFkB signal transduction pathway is exploited by cancerous cells to proliferate and avoid apoptosis. Annexin A1 inhibits that pathway by binding to the p65 subunit, thus making Annexin A1 of particular interest for use as a potential anti-cancer drug. It may also contain tumor suppressive and protective characteristics, as has been evidenced by its ability to protect against DNA damage induced by heat in breast cancer cells.Annexin A1 is strongly expressed on the cell membrane and occasionally in the cytoplasm of tumor cells in 97% of samples from patients with hairy cell leukemia. By contrast, B-cell lymphomas other than hairy cell leukemia are ANXA1 negative. Thus, ANXA1 is a molecule specific to hairy cell leukemia that can be used to differentiate this disease from other B-cell lymphomas.

Rabbit Monoclonal Anti-Human
Annexin VII-EP367



Colon Ca stained with Anti-Annexin VII

Clone	:	EP367
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus/Cytoplasm/Membrane
Control	:	Cervical Ca, Tonsil, Melanoma, Prostate Ca, Prostate, Colon Ca

Catalog#	Catalog#	Catalog#
PR264-3ml (RTU)	PR264-6ml (RTU)	—
HAR264-3ml (RTU)	HAR264-6ml (RTU)	—
CR264-0.1ml (Conc)	CR264-0.5ml (Conc)	CR264-1ml (Conc)

TE

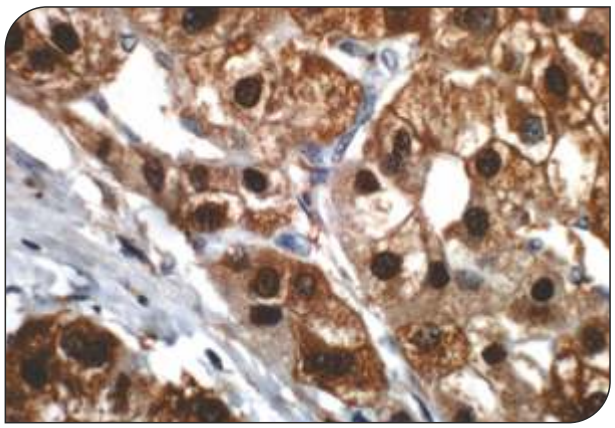
Annexin VII, also known as Annexin A7, is a calcium/phospholipid binding protein belongs to the annexin superfamily. Annexin VII is broadly expressed in normal and tumor cells. Dysregulation of Annexin VII has been linked to progression of several types of tumors. The role of Annexin VII expression in tumor progression is tumor type specific. It acts as a tumor suppressor in glioblastoma, melanoma and prostate carcinoma, whereas high expression of Annexin VII may be associated with poor prognosis of hepatocellular carcinoma and gastric carcinoma.

E -EDTA BUFFER

TE -TRIS-EDTA BUFFER

C -CITRATE BUFFER

Mouse Monoclonal Anti-Human
Arginase1-ARG1/1125+ARG1/1126



HCC stained with Anti-Arginase1

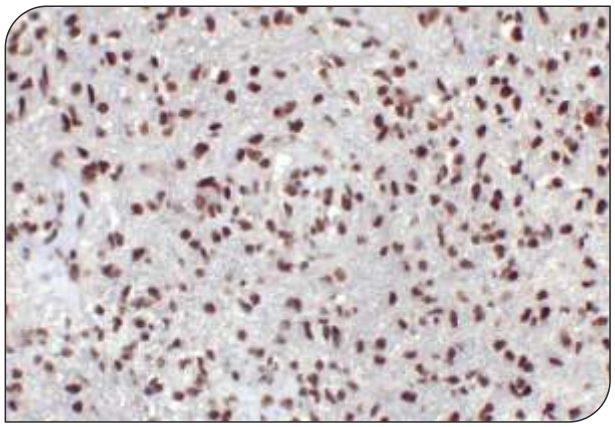
Clone	:	ARG1/1125+ARG1/1126
Isotype	:	Mouse IgG3k
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Hepatocellular Ca (HCC), Liver

Catalog#	Catalog#	Catalog#
PM230-3ml (RTU)	PM230-6ml (RTU)	—
HAM230-3ml (RTU)	HAM230-6ml (RTU)	—
CM230-0.1ml (Conc)	CM230-0.5ml (Conc)	CM230-1ml (Conc)

TE

Recognizes a protein of 35-38kDa, which is identified as Arginase 1 (ARG1). Arginase is a manganese metalloenzyme that catalyzes the hydrolysis of arginine to generate ornithine and urea. Arginase I and II are isoenzymes, which differ in subcellular localization, regulation, and possibly function. Arginase I is a cytosolic enzyme, which is expressed mainly in the liver as part of the urea cycle, where as Arginase II is a mitochondrial protein found in a variety of tissues. Antibody to ARG-1 labels hepatocytes in normal tissues and granulocytes in peripheral blood. ARG-1 is a sensitive and specific marker for identification of hepatocellular carcinoma.

Mouse Monoclonal Anti-Human
ATRX-D5



Brain stained with Anti-ATRX

Clone	:	D5
Isotype	:	Mouse IgG2ak
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Astrocytoma, Glioma, Brain

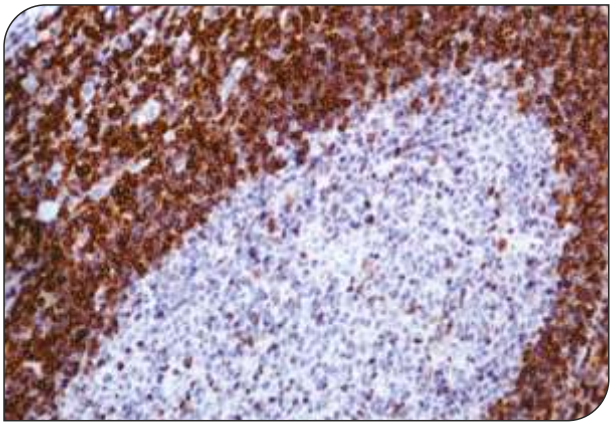
Catalog#	Catalog#	Catalog#
PM229-3ml (RTU)	PM229-6ml (RTU)	—
HAM229-3ml (RTU)	HAM229-6ml (RTU)	—
CM229-0.1ml (Conc)	CM229-0.5ml (Conc)	CM229-1ml (Conc)

TE

ATRX is a member of the Snf2 family of helicase/ATPases, which contribute to the remodeling of the nucelosome structure in an ATP dependent manner, and facilitate the initiation of transcription and replication. Structurally, ATRX contains a PHD zinc finger motif. ATRX is regulated throughout the cell cycle where it is differentially distributed within the nucleus.

During interphase, ATRX predominately associates with the nuclear matrix, while during mitosis, ATRX localizes with condensed chromatin. At the onset of M phase, phosphorylation rapidly induces this redistribution of ATRX to the short arms of human acrocentric chromosomes, where it then specifically complexes with hete-rochromatin protein 1a to mediate chromosomal segregation. Mutations in the ATRX gene correlate with a high incidence of severe X-linked form of syndromal mental retardation associated with a thalassaemia or ATRX syndrome.

Rabbit Monoclonal Anti-Human
BCL2-EP36



Tonsil stained with Anti-BCL2

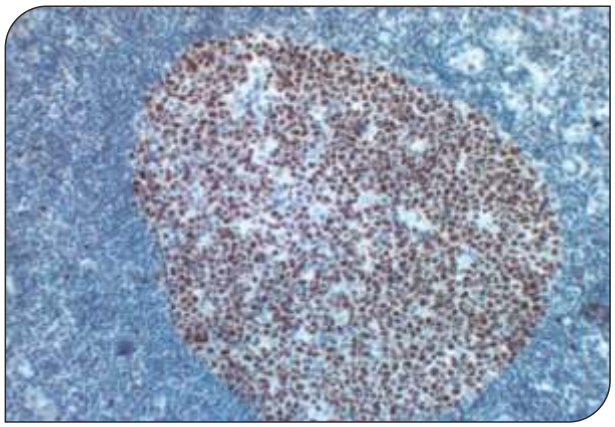
Clone	:	EP36
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Tonsil, Follicular Lymphoma

Catalog#	Catalog#	Catalog#
PR004-3ml (RTU)	PR004-6ml (RTU)	—
HAR004-3ml (RTU)	HAR004-6ml (RTU)	—
CR004-0.1ml (Conc)	CR004-0.5ml (Conc)	CR004-1ml (Conc)

TE

The BCL2 family of proteins regulates apoptosis by controlling mitochondrial permeability and release of cytochrome c. BCL2 is an anti-apoptotic protein that resides in the outer mitochondrial wall and inhibits release of cytochrome c. Overexpression of BCL2 has been shown to promote cell survival by suppressing apoptosis. It has been documented that BCL2 becomes deregulated in tumor cells as a result of translocation into the immunoglobulin heavy chain locus and is therefore activated in B-cell malignancies. BCL2 is useful in differentiation of follicular lymphoma from reactive follicular proliferation (BCL2 negative). In addition, BCL2 has been shown to be correlated with disease prognosis in breast cancer, prostate cancer, ovarian cancer, endometrial cancer and colon cancer.

Rabbit Monoclonal Anti-Human
BCL6-EP278



Tonsil stained with Anti-BCL6

Clone	:	EP278
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Tonsil, Non-Hodgkin's Lymphoma

Catalog#	Catalog#	Catalog#
PR166-3ml (RTU)	PR166-6ml (RTU)	—
CR166-0.1ml (Conc)	CR166-0.5ml (Conc)	CR166-1ml (Conc)

E

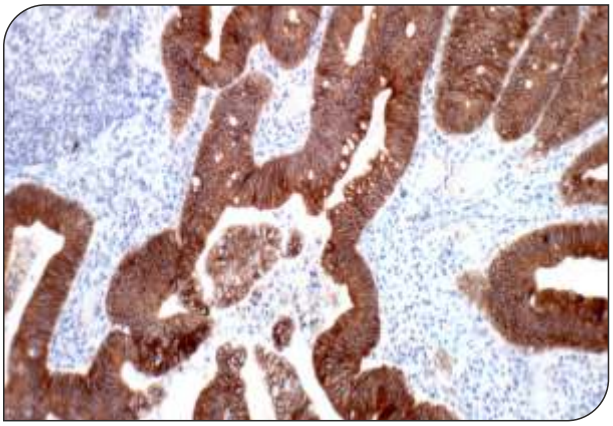
BCL6 is a Kruppel-type zinc finger transcription factor spanning 706 amino acids. BCL6 plays a central role in germinal center (GC) formation, functioning as a regulator of B lymphocyte growth and development by protecting GC B cells from undergoing DNA damage-induced apotosis. BCL6 is involved in mammary epithelial differentiation. BCL6 expression is mainly localized in GC B-cells. Surrounding mantle and marginal zone B cells, as well as plasma cells and marrow B-cell precursors are negative for BCL6.

E - EDTA BUFFER

TE - TRIS-EDTA BUFFER

C - CITRATE BUFFER

Rabbit Monoclonal Anti-Human
Beta Catenin-EP35



Colon Ca stained with Anti-Beta Catenin

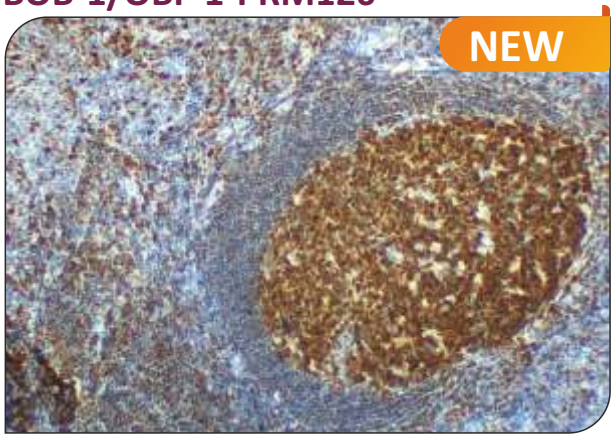
Clone	:	EP35
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm / Membrane / Nucleus
Control	:	Colon Ca, Breast, Fibromatosis

Catalog#	Catalog#	Catalog#
PR005-3ml (RTU)	PR005-6ml (RTU)	—
HAR005-3ml (RTU)	HAR005-6ml (RTU)	—
CR005-0.1ml (Conc)	CR005-0.5ml (Conc)	CR278-1ml (Conc)

E

Beta Catenin is a key regulatory protein involved in cell adhesion and signal transduction through the Wnt pathway. It plays important roles in development, cellular proliferation and differentiation. Mutations in the Beta Catenin gene CTNNB1 leading to stabilization of Beta Catenin in the cytoplasm and translocation to the nucleus have been implicated in various forms of tumor including familial adenomatous polyposis, fibromatosis, solitary fibrous tumors, and endometrial carcinoma. A nuclear accumulation of Beta Catenin in fibromatosis (desmoid tumor) in various locations including breast and mesentery is useful in the differentiation of this tumor from other fibroblast like lesions.

Rabbit Monoclonal Anti-Human
BOB-1/OBF-1-PRM126



Tonsil stained with Anti-BOB-1/OBF-1

Clone	:	PRM126
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm and Nucleus
Control	:	Tonsil, Lymph Node

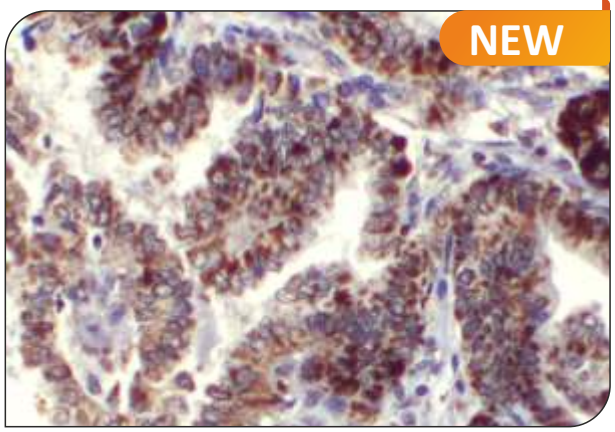
Catalog#	Catalog#	Catalog#
PR328-3ml (RTU)	PR328-6ml (RTU)	—
HAR328-3ml (RTU)	HAR328-6ml (RTU)	—
CR328-0.1ml (Conc)	CR328-0.5ml (Conc)	CR328-1ml (Conc)

TE

The BOB-1 protein is a co-activator that interacts with OCT-1 and/or OCT-2 transcription factors, and is critical in germinal center formation and immunoglobulin production. The strongest expression of BOB-1 is found in the germinal center, mantle-zone B cells, and plasma cells. Because BOB.1/OBF.1 are germinal center derived, L&H cells in Nodular Lymphocyte Predominant Hodgkin's Lymphoma are consistently immunoreactive for BOB-1. Conversely, the Hodgkin/Reed-Sternberg cells in classical Hodgkin's Lymphoma either do not express both or express only one of the two proteins or neither.

In Diffuse Large B-cell Lymphomas, the highest expression levels for BOB-1 antibody are reported in Follicular Center Lymphomas, Diffuse Large B-cell Lymphomas, and Burkitt Lymphomas. B-CLL, MALT-type, and Mantle Cell Lymphomas score negative or display a heterogenous/ weaker activity. The strong nuclear expression of BOB-1 antibody and Oct-2 by Germinal Center Derived Lymphomas makes these antibodies a novel class of broad spectrum B-lineage immunohistochemical markers in the differential diagnosis of Lymphomas, specifically between Primary Mediastinal B-cell Lymphoma from classical Hodgkin's Disease.

Rabbit Monoclonal Anti-Human
BRAF-V600E-RM8



Papillary Thyroid Ca stained with Anti-BRAF-V600E

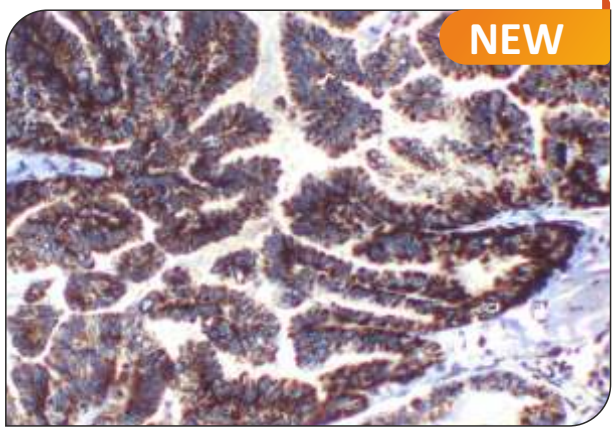
Clone	:	RM8
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Mutated Melanoma, Papillary Thyroid Ca

Catalog#	Catalog#	Catalog#
PR327-3ml (RTU)	PR327-6ml (RTU)	—
HAR327-3ml (RTU)	HAR327-6ml (RTU)	—
CR327-0.1ml (Conc)	CR327-0.5ml (Conc)	CR327-1ml (Conc)

TE

BRAF is a human gene that makes a protein called B-Raf, which is more formally known as serine/threonine-protein kinase B-Raf. The B-Raf protein is involved in sending signals inside cells, which are involved in directing cell growth and mutated in some human cancers. Mutations in the BRAF gene can cause disease in two ways. First, mutations can be inherited and cause birth defects. Second, mutations can appear later in life and cause cancer, as an oncogene. Mutations in this gene have been found in cancers, including non-Hodgkin lymphoma, colorectal cancer, malignant melanoma, papillary thyroid carcinoma, non-small-cell lung carcinoma, and adenocarcinoma of the lung. In 90% of the cases, thymine is substituted with adenine at nucleotide 1799. This leads to valine (V) being substituted for by glutamate (E) at codon 600 (referred to as V600E) in the activation segment that has been found in human cancers. This mutation has been widely observed in papillary thyroid carcinoma, colorectal cancer, melanoma and non-small-cell lung cancer. BRAF-V600E mutation are present in 57% of Langerhans cell histiocytosis patients. The V600E mutation is a likely driver mutation in 100% of cases of hairy cell leukemia. This antibody stains the RBC in the tissue as well. Note: Erythrocytes staining may be observed in some tissues

Rabbit Monoclonal Anti-Human
BRAF-PRM130



Papillary Thyroid Ca stained with Anti-BRAF

Clone	:	PRM130
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Papillary Thyroid Ca

Catalog#	Catalog#	Catalog#
PR354-3ml (RTU)	PR354-6ml (RTU)	—
HAR354-3ml (RTU)	HAR354-6ml (RTU)	—
CR354-0.1ml (Conc)	CR354-0.5ml (Conc)	CR354-1ml (Conc)

TE

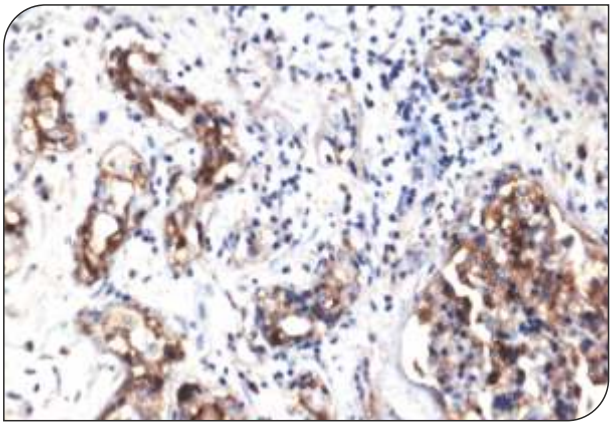
Rapidly accelerated fibrosarcoma (Raf) kinase is a serine/threonine kinase and component of the MAPK/ERK signaling pathway. Upon activation by upstream RAS signaling, Raf dimerizes and phosphorylates MEK1 leading to activation of transcription factors forcell growth, proliferation and survival. Raf exists as three isoforms, A-RAF, B-RAF and C-RAF, that all consist of three conserved regions with domain specific functions. CR1 contains a cysteine-rich domain and a RAS-binding domain, CR2 is essential for negative regulation through inhibition of phosphorylation sites, and CR3 is the kinase domain. B-RAF is the most prominent isoform, expressed in most tissues, and localized to the cytosol. Activating mutations in B-RAF have been found in various cancers, including melanoma and non-small cell lung cancer as well as in patients with Langerhans cell histiocytosis. Note: Erythrocytes staining may be observed in some tissues

E - EDTA BUFFER

TE - TRIS-EDTA BUFFER

C - CITRATE BUFFER

Rabbit Monoclonal Anti-Human
C4D-EP272



Rejected Kidney stained with Anti-C4D

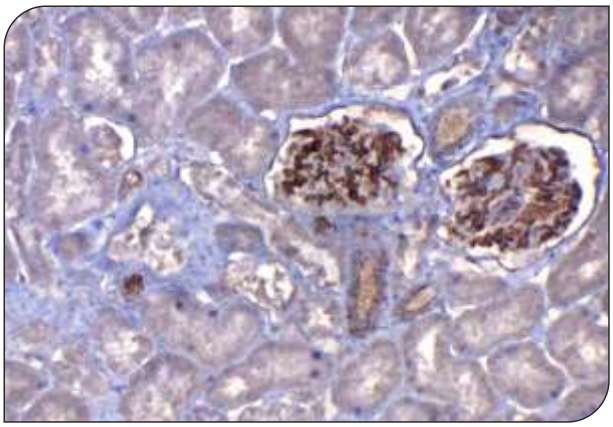
Clone	:	EP272
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Rejected Kidney (Antibody mediated)

Catalog#	Catalog#	Catalog#
PR216-3ml (RTU)	PR216-6ml (RTU)	—
HAR216-3ml (RTU)	HAR216-6ml (RTU)	—
CR216-0.1ml (Conc)	CR216-0.5ml (Conc)	CR216-1ml (Conc)

TE

C4D is the degradation product of the activated complement factor C4, Following activation and degradation of the C4 molecule, thioester groups are exposed which allow transient, covalent binding of the degradation product C4D to endothelial cell surfaces and extracellular matrix components of vascular basement membranes near the sites of C4 activation. C4D is also found in intracytoplasmic vacuoles of endothelial cells. Covalent binding renders C4D a stable molecule that can easily be detected by immunohistochemistry. It was demonstrated that patients with suspected antibody mediated injury in the renal graft had a linear C4D staining pattern in peritubular capillaries and that the presence of C4D was associated with impaired graft function. Except kidney allografts, little is known currently about C4D accumulation in other solid organ allografts. Preliminary data suggest that heart allografts are comparable with kidney transplants. C4D was found in early post transplant endomyocardial biopsies and was associated with poor graft survival. In dysfunctioning lung transplants, C4D could be detected in septal capillaries. C4D has also been found in liver allografts carrying a diagnosis of antibody mediated rejection.

Mouse Monoclonal Anti-Human
C4D-C4D204



Rejected Kidney stained with Anti-C4D

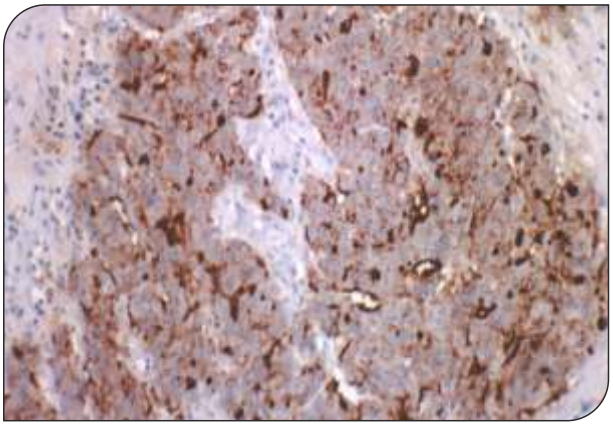
Clone	:	C4D204
Isotype	:	Mouse IgG1k
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Rejected Kidney (Antibody Mediated)

Catalog#	Catalog#	Catalog#
PM146-3ml (RTU)	PM146-6ml (RTU)	—
HAM146-3ml (RTU)	HAM146-6ml (RTU)	—
CM146-0.1ml (Conc)	CM146-0.5ml (Conc)	CM146-1ml (Conc)

TE

This antibody is specific to Complement 4d (C4D) and it reacts with the secreted as well as cell bound C4D protein. C4D is a degradation product of the activated complement factor C4b. Complement 4d is typically initiated by binding of antibodies to specific target molecules. Following activation and degradation of the C4 molecule, thioester groups are exposed, which allow transient, covalent binding of the degradation product Complement 4d to endothelial cell surfaces and extracellular matrix components of vascular basement membranes near the sites of C4 activation. The presence of C4d in peritubular capillaries is a key indicator for acute humoral (i.e. antibody mediated) rejection of kidney, heart, pancreas and lung allografts. As an established marker of antibody mediated acute renal allograft rejection and its proclivity for endothelium, this component can be detected in peritubular capillaries in chronic renal allograft rejection as well as hyperacute rejection, acute vascular rejection, acute cellular rejection, and borderline rejection. It has been shown to be a significant predictor of transplant kidney graft survival. Anti-C4D, combined with anti-C3D, can be utilized as a tool for diagnosis of AR that may serve to warrant prompt and aggressive anti-rejection treatment.

Rabbit Monoclonal Anti-Human
CA125-EP48



Ovarian Ca stained with Anti-CA125

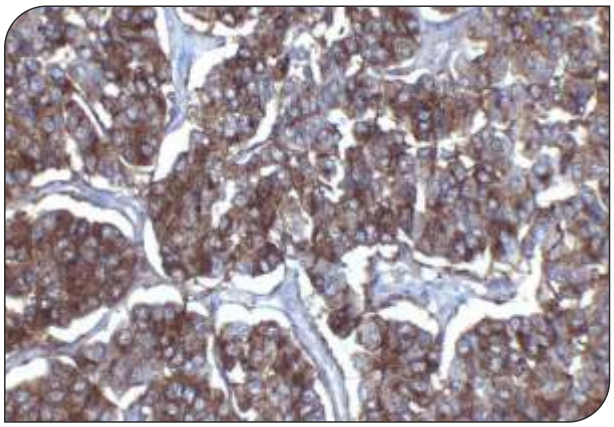
Clone	:	EP48
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Membrane and Cytoplasm
Control	:	Ovarian Ca, Cervical Ca

Catalog#	Catalog#	Catalog#
PR006-3ml (RTU)	PR006-6ml (RTU)	—
HAR006-3ml (RTU)	HAR006-6ml (RTU)	—
CR006-0.1ml (Conc)	CR006-0.5ml (Conc)	CR006-1ml (Conc)

C

Carcinoma antigen 125 (CA125) is a high molecular weight tumor antigen. It is a heavily glycosylated mucin encoded by MUC16 gene. It is expressed on ovarian carcinoma and several epithelial tumors including endometrial carcinoma, cervix carcinoma, and clear cell carcinoma of bladder. In addition, CA125 also binds to mesothelin and expressed on mesothelioma. The binding of CA125 to mesothelin may contribute to ovarian cancer metastasis to peritoneum.

Mouse Monoclonal Anti-Human
CA19.9-121SLE



Pancreatic Adeno Ca stained with Anti-CA19.9

Clone	:	121SLE
Isotype	:	Mouse IgMk
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Stomach, Colon Ca, Pancreatic Adeno Ca

Catalog#	Catalog#	Catalog#
PM206-3ml (RTU)	PM206-6ml (RTU)	—
HAM206-3ml (RTU)	HAM206-6ml (RTU)	—
CM206-0.1ml (Conc)	CM206-0.5ml (Conc)	CM206-1ml (Conc)

TE

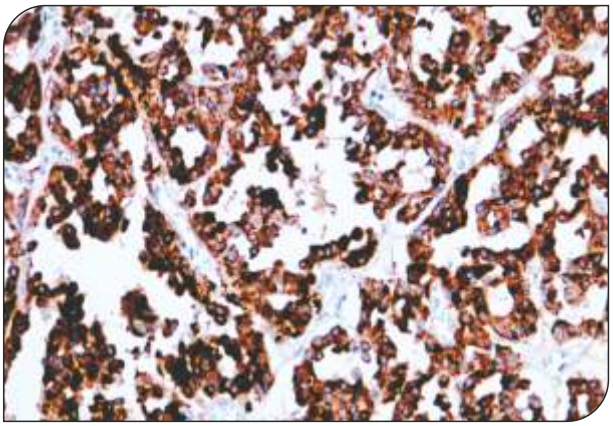
CA19.9, a carbohydrate epitope expressed on a high molecular weight (MW) (>400kDa) mucin glycoprotein, is a sialyl Lewis azstructure which is synthesized from type 1 blood group precursor chains and is present in individuals expressing the Lewis a and/or Lewis b blood group antigens. In normal tissues, sialyl Lewis a antigen is present in ductal epithelium of the breast, kidney, salivary gland, and sweat glands. Its expression is greatly enhanced in serum as well as in the majority of tumor cells in gastrointestinal (GI) carcinomas, including adenocarcinomas of the stomach, intestine, and pancreas. Preoperative elevated CA19.9 levels in patients with stage I pancreatic carcinoma decrease to normal values following surgery. When used serially, CA19.9 can predict recurrence of disease prior to radiographic or clinical findings.

E -EDTA BUFFER

TE -TRIS-EDTA BUFFER

C -CITRATE BUFFER

Rabbit Monoclonal Anti-Human
Calcitonin-EP92



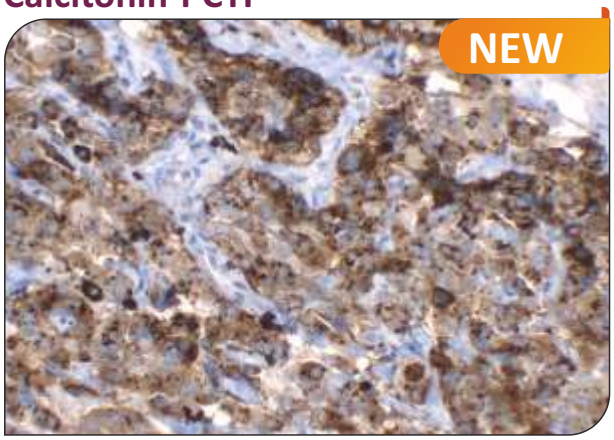
Thyroid Medullary Ca stained with Anti-Calcitonin

Clone	:	EP92
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Thyroid Medullary Ca, Thyroid

Catalog#	Catalog#	Catalog#
PR007-3ml (RTU)	PR007-6ml (RTU)	—
HAR007-3ml (RTU)	HAR007-6ml (RTU)	—
CR007-0.1ml (Conc)	CR007-0.5ml (Conc)	CR007-1ml (Conc)

TE Calcitonin is a 32-amino acid polypeptide hormone that is commonly expressed in the Parafollicular C-cells in the thyroid gland. Calcitonin is a potent plasma calcium lowering peptide; it decreases the level of calcium and phosphate in blood by promoting the incorporation of these ions in bones. Calcitonin antibody is useful for the identification of C-cell hyperplasia and medullary thyroid carcinomas.

Rabbit Monoclonal Anti-Human
Calcitonin-PCTP



Thyroid Ca stained with Anti-Calcitonin

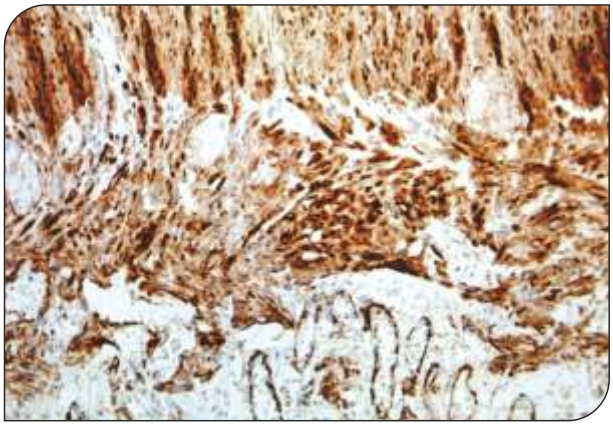
Clone	:	PCTP
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Medullary Thyroid Ca, Thyroid

Catalog#	Catalog#	Catalog#
PR363-3ml (RTU)	PR363-6ml (RTU)	—
HAR363-3ml (RTU)	HAR363-6ml (RTU)	—
CR363-0.1ml (Conc)	CR363-0.5ml (Conc)	CR363-1ml (Conc)

TE Calcitonin is a 32 amino acid peptide synthesized by the parafollicular C cells of the thyroid. It acts through its receptors to inhibit osteoclast mediated bone resorption, decrease calcium resorption by kidney and decrease calcium absorption by intestines. The action of calcitonin is therefore to cause a reduction in serum calcium, an effect opposite to that of parathyroid hormone.

The antibody is useful for the identification of calcitonin-producing C cells and is a useful aid for classification of medullary thyroid carcinoma.

Rabbit Monoclonal Anti-Human
Caldesmon-EP19



Smooth Muscle stained with Anti-Caldesmon

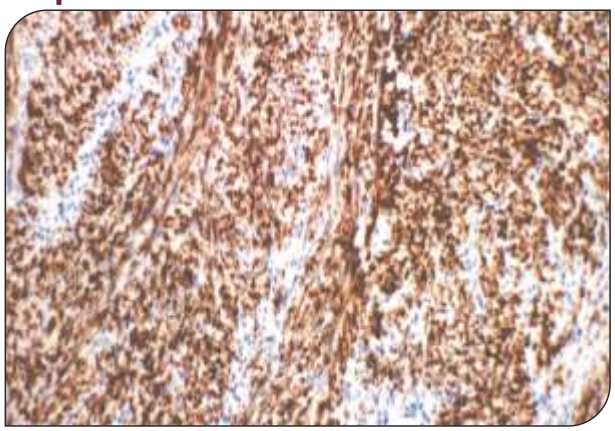
Clone	:	EP19
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Leiomyoma, Uterus, Smooth Muscle

Catalog#	Catalog#	Catalog#
PR008-3ml (RTU)	PR008-6ml (RTU)	—
HAR008-3ml (RTU)	HAR008-6ml (RTU)	—
CR008-0.1ml (Conc)	CR008-0.5ml (Conc)	CR008-1ml (Conc)

C

Caldesmon is a smooth muscle regulatory protein that interacts with actin, myosin, tropomyosin and calmodulin. It is more specific to smooth muscle differentiation than desmin and muscle specific actin. Also, it is useful in differentiation of smooth muscle from myofibroblast tumors and uterus leiomyoma from endometrial stroma tumor. Caldesmon is a marker for identification of epitheloid mesothelioma.

Rabbit Monoclonal Anti-Human
Calponin 1-EP63



Uterus stained with Anti-Calponin 1

Clone	:	EP63
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Smooth Muscle, Uterus

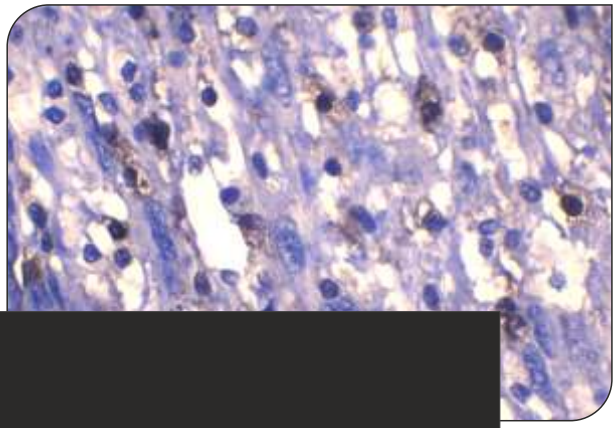
Catalog#	Catalog#	Catalog#
PR009-3ml (RTU)	PR009-6ml (RTU)	—
HAR009-3ml (RTU)	HAR009-6ml (RTU)	—
CR009-0.1ml (Conc)	CR009-0.5ml (Conc)	CR009-1ml (Conc)

C

Calponin is a smooth muscle specific, actin, tropomyosin and calmodulin binding protein thought to be involved in regulation of actomyosin as well as the regulation or modulation of contraction. It is expressed on smooth muscle cells and myoepithelial cells. Calponin has been used to identify invasion of breast lesion. Additionally, Calponin is expressed on malignant fibrous histiocytoma of bone and adenoid cystic carcinoma of salivary gland. The consistently positive staining pattern in adenoid cystic carcinomas may be useful in discriminating histologically similar but consistently negative polymorphous low grade adenocarcinomas.

Rabbit Polyclonal Anti-Human

Calretinin-Polyclonal



TE

Calretinin is a member of the superfamily of calcium binding protein. It is abundantly expressed in central and peripheral neural tissues. Calretinin is expressed by both normal and neoplastic mesothelial cells and is a useful marker for the identification of malignant mesothelioma of the epithelial type and for the differentiation of the malignancies from metastasis of lung adenocarcinoma. Differential diagnosis is aided by the results from a panel of antibodies.

[redacted]

Brain, Testis

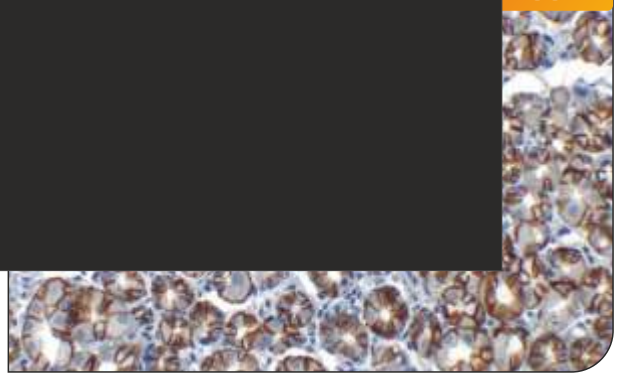
Catalog#
—
—
4-1ml (Conc)

TE

Carbonic anhydrases (CAs) are a large family of zinc metalloenzymes that catalyze the reversible hydration of carbon dioxide. They participate in a variety of biological processes, including respiration, calicification, acid-base balance, bone resorption, and the formation of aqueous humor, cerebrospinal fluid, saliva, and gastric acid. They show extensive diversity in tissue distribution and in their subcellular localization.

Carbonic Anhydrase 9 (CA-9) is a transmembrane protein and the only tudor CA isoenzyme known. It is expressed in all clear-cell renal cell carcinoma, but is not detected in normal kidney or most other normal tissues. It may be invovled in cell proliferation and transformation. Carbonic Anhydrase 9 is considered to be one of the best cellular biomarkers of hypoxic regions in many solid tumors.

EW

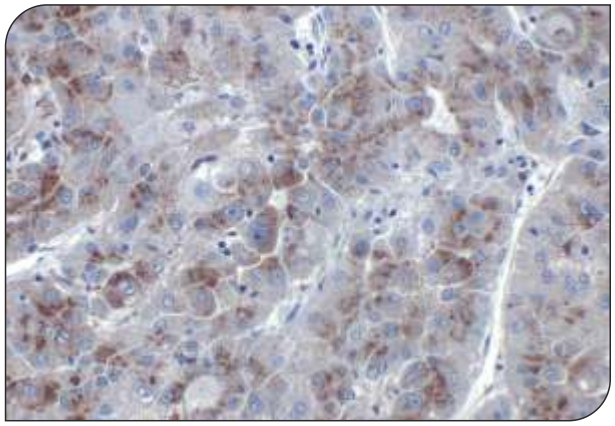


Stomach stained with Anti-Carbonic Anhydrase 9

Clone	:	EP161
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Membrane, Cytoplasm
Control	:	Stomach, RCC, Gall Bladder, Pancreas

Catalog#	Catalog#	Catalog#
PR358-3ml (RTU)	PR358-6ml (RTU)	—
HAR358-3ml (RTU)	HAR358-6ml (RTU)	—
CR358-0.1ml (Conc)	CR358-0.5ml (Conc)	CR358-1ml (Conc)

Rabbit Monoclonal Anti-Human
Cathepsin D-EP81



Breast Ca stained with Anti-Cathepsin D

Clone	:	EP81
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Breast Ca

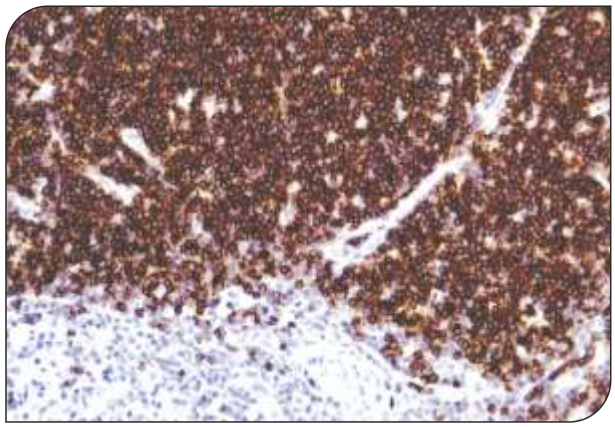
Catalog#	Catalog#	Catalog#
PR010-3ml (RTU)	PR010-6ml (RTU)	—
HAR010-3ml (RTU)	HAR010-6ml (RTU)	—
CR010-0.1ml (Conc)	CR010-0.5ml (Conc)	CR010-1ml (Conc)

TE

Cathepsin D is a ubiquitously expressed lysosomal protease that is involved in proteolytic degradation, cell invasion, and apoptosis. It is suspected to play important roles in protein catabolism, antigen processing, degenerative diseases, and cancer progress ion. Cathepsin D is present in many types of cancer cells. In breast cancer, it is induced by estrogens and its expression is correlated with a higher risk of metastasis and poor disease free survival. Extensive studies have been also performed to evaluate the clinical and therapeutic implication of Cathepsin D expression in non-gynecological solid tumors. Emerging evidence indicates Cathepsin D seems to facilitate early stages of tumor progression such as cell proliferation and local dissemination.

Rabbit Monoclonal Anti-Human
CD1a-EP80

E TE



Thymoma stained with Anti-CD1a

Clone	:	EP80
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Membrane
Control	:	Thymoma

Catalog#	Catalog#	Catalog#
PR011-3ml (RTU)	PR011-6ml (RTU)	—
HAR011-3ml (RTU)	HAR011-6ml (RTU)	—
CR011-0.1ml (Conc)	CR011-0.5ml (Conc)	CR011-1ml (Conc)

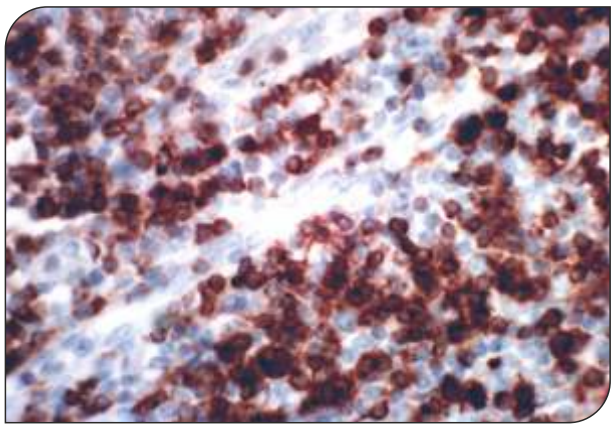
Cluster of Differentiation 1a (CD1a) is part of a family of major histocompatibility complex (MHC) antigen-like glycoproteins that associate with beta-2-microglobulin. CD1a binds self and non-self lipid and glycolipid antigens, presenting them to T-cell receptors on natural killer T-cells. CD1a antibody labels cortical thymocytes, Langerhan's cells and dendritic cells. It has been used to identify Langerhan's cell histiocytosis and precursor T-lymphoblastic lymphoma/leukemia.

E -EDTA BUFFER

TE -TRIS-EDTA BUFFER

C -CITRATE BUFFER

Rabbit Monoclonal Anti-Human
CD2-EP222



Tonsil stained with Anti-CD2

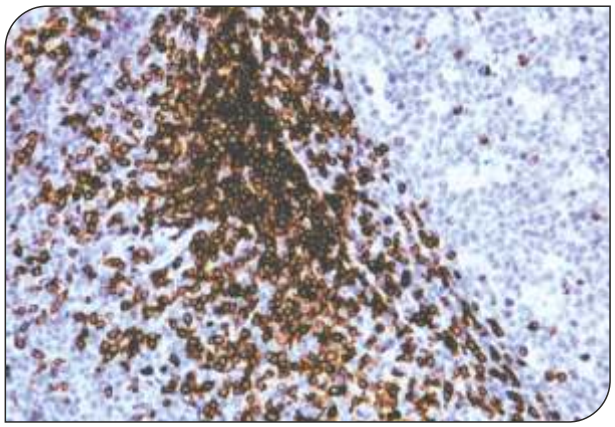
Clone	:	EP222
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Membrane
Control	:	Tonsil, T-Cell Lymphoma

Catalog#	Catalog#	Catalog#
PR142-3ml (RTU)	PR142-6ml (RTU)	—
HAR142-3ml (RTU)	HAR142-6ml (RTU)	—
CR142-0.1ml (Conc)	CR142-0.5ml (Conc)	CR142-1ml (Conc)

TE

T-cell surface antigen CD2 (CD2) is a T-cell specific surface glycoprotein that is critically important for mediating adherence of T cells to antigen presenting cells or target cells. It interacts with lymphocyte function associated antigen (LFA-3) and CD48/BCM1 to mediate adhesion between T-cells and other cell types. CD2 is involved in triggering T-cells, and the cytoplasmic domain is involved in signaling. CD2 is a pan T-cell marker. CD2 antibody labels T-cell, thymocytes and natural killer (NK) cells. CD2 is absent in a small subset of T cells. CD2 antibody is useful for identification of precursor and mature T-cell lymphomas. Aberrant loss of CD2 in T-cell lymphomas may help to distinguish them from reactive T-cell proliferations.

Rabbit Monoclonal Anti-Human
CD3-EP41



Tonsil stained with Anti-CD3

Clone	:	EP41
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Membrane and Cytoplasm
Control	:	Tonsil, T-Cell Lymphoma

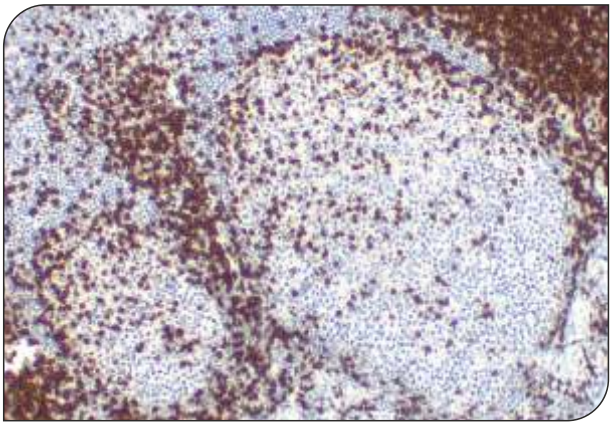
Catalog#	Catalog#	Catalog#
PR012-3ml (RTU)	PR012-6ml (RTU)	—
HAR012-3ml (RTU)	HAR012-6ml (RTU)	—
CR012-0.1ml (Conc)	CR012-0.5ml (Conc)	CR012-1ml (Conc)

TE

CD3 (Cluster of Differentiation 3) is a complex of proteins that associates directly with the T-cell antigen receptor (TCR). CD3 is composed of five invariant polypeptide chains that associate to form three dimers. The five invariant chains of CD3 are labeled gamma, delta, epsilon, zeta, and eta. The CD3 is involved in T-cell development and survival. It is expressed on T-cells in thymus, peripheral lymphoid tissue, blood and bone marrow. CD3 is a commonly used marker for identification of T-cell and T-cell derived malignancies. This CD3 antibody has been validated by the 9th International Conference on Human Leukocyte Differentiation Antigens (HLDA9).

Rabbit Polyclonal Anti-Human

CD3-Polyclonal



Tonsil stained with Anti-CD3

Clone	:	Polyclonal
Isotype	:	NA
Reactivity	:	Human, FFPE
Localization	:	Membrane and Cytoplasm
Control	:	Tonsil, T-Cell Lymphoma

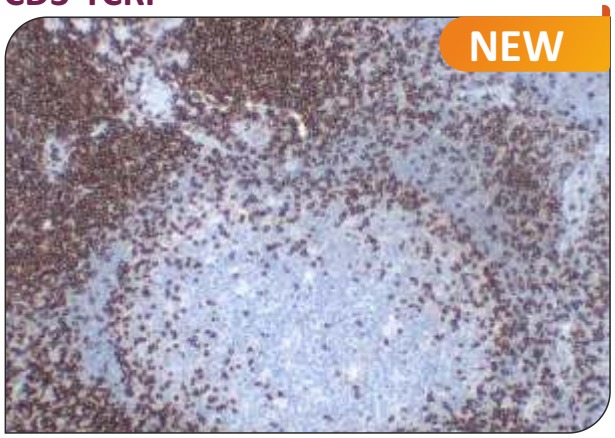
Catalog#	Catalog#	Catalog#
PP160-3ml (RTU)	PP160-6ml (RTU)	—
HAP160-3ml (RTU)	HAP160-6ml (RTU)	—
CP160-0.1ml (Conc)	CP160-0.5ml (Conc)	CP160-1ml (Conc)

TE

CD3 is a highly specific marker for T lymphocytes. It is expressed by T cells in thymus, bone marrow, peripheral lymphoid tissue and blood. The majority of T-cell neoplasm expresses the CD3 antigen, while it is absent from non T-cell lymphoid malignancies. CD3 is an essential marker for the initial evaluation of chronic lymphoproliferative disorders.

Rabbit Monoclonal Anti-Human

CD3-TCRP



Tonsil stained with Anti-CD3

Clone	:	TCRP
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Membrane
Control	:	Appendix, Tonsil

Catalog#	Catalog#	Catalog#
PR347-3ml (RTU)	PR347-6ml (RTU)	—
HAR347-3ml (RTU)	HAR347-6ml (RTU)	—
CR347-0.1ml (Conc)	CR347-0.5ml (Conc)	CR347-1ml (Conc)

TE

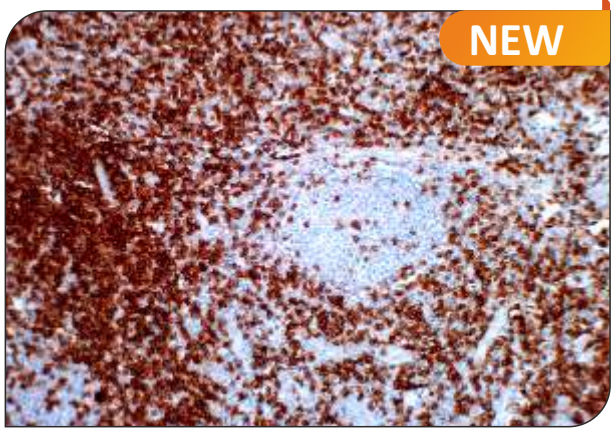
CD3 protein is a T-cell marker, a complex composed of 4 membrane glycoprotein subtypes, including extracellular, transmembrane and intracellular domains. The CD3 complex is responsible for mediating the process of transferring the activation signal generated by the TCR recognition antigen to the cell, mediating the proliferation of T cells and the release of cytokines. CD3 is only found in T cells. In malignant lymphoma, CD3 is a widespread T cell line-restricted antigen, which can be detected in 80%-97% of T-cell lymphomas. Mature T-cell lymphomas may lose CD3 abnormally, such as mycosis fungoides, peripheral T-cell lymphoma, and anaplastic large-cell lymphoma. CD3 is an important marker for the classification of malignant lymphoma and lymphoid leukemia.

E - EDTA BUFFER

TE - TRIS-EDTA BUFFER

C - CITRATE BUFFER

Mouse Monoclonal Anti-Human
CD3-PS1



Tonsil stained with Anti-CD3

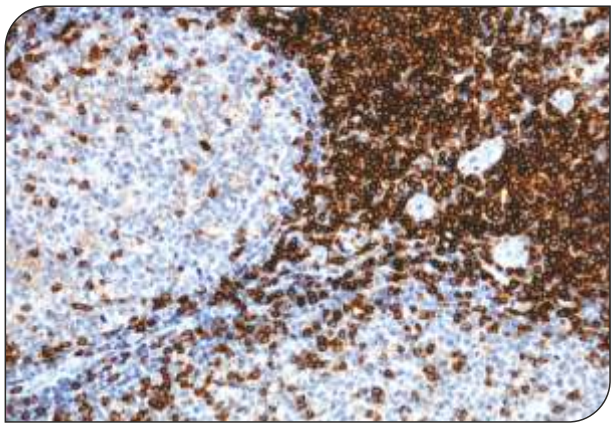
Clone	:	PS1
Isotype	:	Mouse IgG2a
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm and Membrane
Control	:	Tonsil, Thymus, Lymph Node

Catalog#	Catalog#	Catalog#
PM296-3ml (RTU)	PM296-6ml (RTU)	—
HAM296-3ml (RTU)	HAM296-6ml (RTU)	—
CM296-0.1ml (Conc)	CM296-0.5ml (Conc)	CM296-1ml (Conc)

TE

The T-cell antigen receptor (TCR) recognizes foreign antigens and translates such recognition events into intracellular signals that elicit a change in the cell from a dormant to an activated state. Much of this signaling process can be attributed to a multisubunit complex of proteins that associates directly with the TCR. This complex has been designated CD3 (cluster of differentiation 3). It is composed of five invariant polypeptide chains that associate to form three dimers: a heterodimer of g and e chains (ge), a heterodimer of d and e chains (de) and a homodimer of two z chains (zz) or a heterodimer of g and d chains (de). The z and h chains are encoded by the same gene but differ in their carboxyl terminal ends due to an alternative splicing event. The g, e and d chains each contain a single copy of a conserved immunoreceptor tyrosine based activation motif (ITAM). In contrast, the z chain contains three consecutive copies of the same motif. Phosphorylated ITAMs act as docking sites for protein kinases such as ZAP-70 and Syk and are also capable of regulating their kinase activity. The crystal structure of ZAP-70s SH2 domains bound to the z chain ITAMs has been solved.

Rabbit Monoclonal Anti-Human
CD4-EP204



Tonsil stained with Anti-CD4

Clone	:	EP204
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Membrane
Control	:	Tonsil, T-Cell Lymphoma

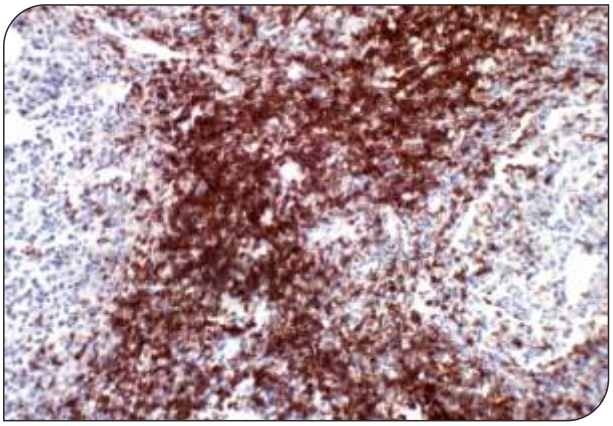
Catalog#	Catalog#	Catalog#
PR013-3ml (RTU)	PR013-6ml (RTU)	—
HAR013-3ml (RTU)	HAR013-6ml (RTU)	—
CR013-0.1ml (Conc)	CR013-0.5ml (Conc)	CR013-1ml (Conc)

E

CD4 is a glycoprotein found on the surface of immune cells such as T-helper cells, monocytes, macrophages and dendritic cells. It is a co-receptor that assists the T-cell receptor (TCR) with an antigen-presenting cell and also interacts directly with MHC class II molecules on the surface of the antigen presenting cells using its extracellular domain. In lymphatic tissues, the CD4+T-cells are seen in large numbers in the parafollicular zone, while scattered cells are found in the germinal centers and mantle zone. CD4 is demonstrated in hepatic sinusoidal cells, monocytes, and monocytes derived cells, but is not expressed on B-cells and immature thymocytes.

Precursor T-lymphoblastic lymphomas are therefore variable in their expression of CD4. CD4 plays an important role in classifications of lymphocytes in inflammatory lesion and malignant lymphoma.

Rabbit Monoclonal Anti-Human
CD5-EP77



Tonsil stained with Anti-CD5

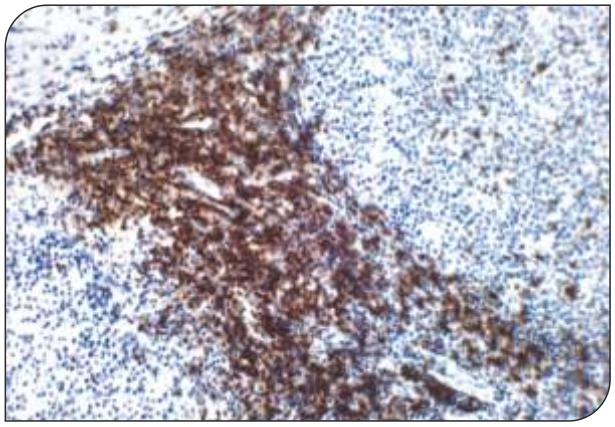
Clone	:	EP77
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Membrane
Control	:	Tonsil, Mantle Cell Lymphoma

Catalog#	Catalog#	Catalog#
PR014-3ml (RTU)	PR014-6ml (RTU)	—
HAR014-3ml (RTU)	HAR014-6ml (RTU)	—
CR014-0.1ml (Conc)	CR014-0.5ml (Conc)	CR014-1ml (Conc)

TE

CD5 (Lymphocyte antigen T1/Leu-1) is a transmembrane glycoprotein which has been implicated as a receptor in the regulation of T-cell proliferation. CD5 antibody labels a variety of T-lymphocytes, mantle zone lymphocytes and a small subset of B-lymphocytes. In tumors, CD5 is expressed on T-cell malignancies, B-cell chronic lymphocytic leukemia (CLL) / small lymphocytic lymphoma (SLL), and mantle-cell lymphoma. It is a useful diagnostic tool for these tumors. In addition, anti-CD5 is helpful in diagnosis of thymic carcinoma (CD5 positive).

Rabbit Monoclonal Anti-Human
CD7-EP132



Tonsil stained with Anti-CD7

Clone	:	EP132
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Membrane
Control	:	Acute T-Cell, Lymphoblastic Leukemia, Tonsil

Catalog#	Catalog#	Catalog#
PR015-3ml (RTU)	PR015-6ml (RTU)	—
HAR015-3ml (RTU)	HAR015-6ml (RTU)	—
CR015-0.1ml (Conc)	CR015-0.5ml (Conc)	CR015-1ml (Conc)

TE

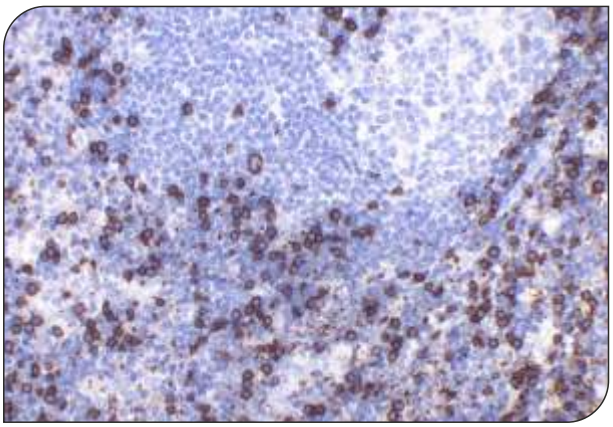
CD7 is a single pass type 1 transmembrane protein that is a member of the immunoglobulin superfamily. It plays an essential role in T-cell interactions and also in T-cell/B cell interactions during early lymphoid development. CD7 is expressed on thymocytes, T and natural killer cells, and progenitors of lymphoid and myeloid cells. It is also expressed on T-cell Acute Lymphoblastic Leukemia /Lymphoma, Acute Myelogenous Leukemia and Chronic Myelogenous Leukemia. CD7 antibody is the most sensitive and specific T-cell deletion marker. Loss of CD7 expression by neoplastic lymphocytes is considered a distinguishing characteristic of mycosis fungoides (MF) and cutaneous T-cell lymphoma.

E - EDTA BUFFER

TE - TRIS-EDTA BUFFER

C - CITRATE BUFFER

Rabbit Monoclonal Anti-Human
CD8-EP334



Tonsil stained with Anti-CD8

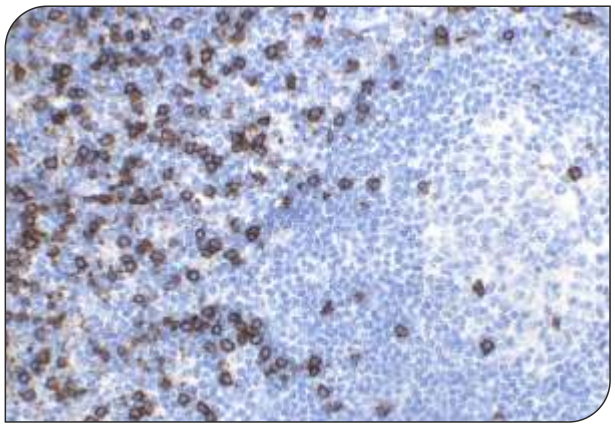
Clone	:	EP334
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Membrane
Control	:	Tonsil

Catalog#	Catalog#	Catalog#
PR223-3ml (RTU)	PR223-6ml (RTU)	—
HAR223-3ml (RTU)	HAR223-6ml (RTU)	—
CR223-0.1ml (Conc)	CR223-0.5ml (Conc)	CR223-1ml (Conc)

TE

CD8 (cluster of differentiation 8) is a transmembrane glycoprotein that functions as a co-receptor with the T-cell receptor (TCR). The CD8 molecule consist of a heterodimer of α and β chains covalently linked by a disulfide bond, and are predominantly expressed on the surface of cytotoxic T cells. CD8 expression can also be detected on natural killer cells, cortical thymocytes and dendritic cells. Cytotoxic CD8+ T-lymphocytes are crucial components of the adaptive immune system that execute immunosurveillance to eliminate nascent tumor cells. Upon simultaneous binding to the major histocompatibility complex (MHC) class I molecule with TCR, cytotoxic T-cell sensitivity is increased 100 fold. CD8 is commonly expressed in T-cell large granular lymphocyte leukemia, and is also co-expressed with CD4 in some T-lymphoblastic lymphoma. Recently, detection of tumor infiltrating CD8+ lymphocytes have been correlated with favorable prognosis and improved survival in patients with colorectal, ovarian, esophageal, renal, lung and pancreatic tumors. A high CD8+ /CD4+ T-cell ratio is also associated with improved survival in colon and ovarian cancer patients.

Mouse Monoclonal Anti-Human
CD8a-C8/468



Tonsil stained with Anti-CD8a

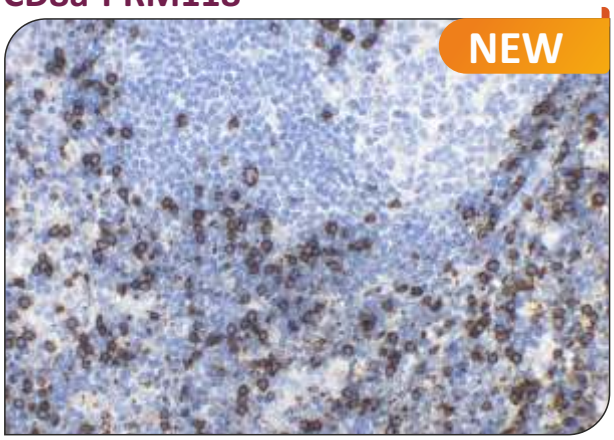
Clone	:	C8/468
Isotype	:	Mouse IgG1k
Reactivity	:	Human, FFPE
Localization	:	Membrane
Control	:	Tonsil, T-Cell Lymphoma

Catalog#	Catalog#	Catalog#
PM148-3ml (RTU)	PM148-6ml (RTU)	—
HAM148-3ml (RTU)	HAM148-6ml (RTU)	—
CM148-0.1ml (Conc)	CM148-0.5ml (Conc)	CM148-1ml (Conc)

TE

CD8 is a cell surface receptor expressed either as a heterodimer with the CD8 beta chain (CD8 alpha/beta) or as a homodimer (CD8 alpha/alpha). A majority of thymocytes and a subpopulation of mature T cells and NK cells express CD8a. CD8 binds to MHC class 1 and through its association with protein tyrosine kinase p56lck plays a role in T cell development and activation of mature T cells. For mature T-cells, CD4 and CD8 are mutually exclusive, so anti-CD8, generally used in conjunction with anti-CD4. It is a useful marker for distinguishing helper/inducer T-lymphocytes, and most peripheral T-cell lymphomas are CD4+/CD8-. Anaplastic large cell lym-phoma is usually CD4+ and CD8-, and in T-lymphoblastic lymphoma/leukemia, CD4 and CD8 are often co-expressed. CD8 is also found in littoral cell angioma of the spleen.

Rabbit Monoclonal Anti-Human
CD8a-PRM118



Tonsil stained with Anti-CD8a

Clone	:	PRM118
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Membrane
Control	:	Tonsil

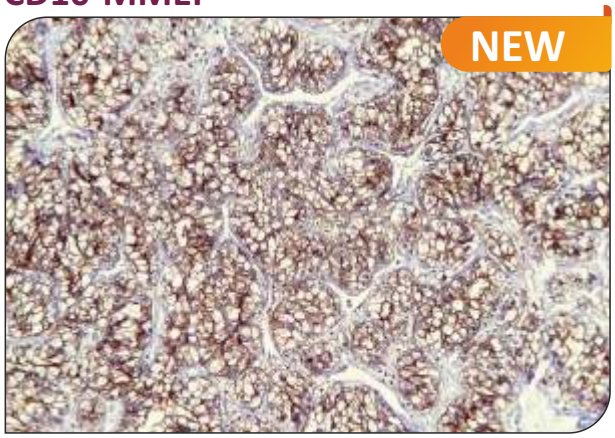
Catalog#	Catalog#	Catalog#
PR319-3ml (RTU)	PR319-6ml (RTU)	—
HAR319-3ml (RTU)	HAR319-6ml (RTU)	—
CR319-0.1ml (Conc)	CR319-0.5ml (Conc)	CR319-1ml (Conc)

TE

The CD8 (cluster of differentiation 8) antigen is a cell surface glycoprotein made up of two subunits alpha and beta.Anti-CD8 is a T-cell marker for the detection of cytotoxic/suppressor lymphocytes.CD8 is also detected on NK cells, some thymocytes, some null cells and bone marrow cells. This antibody, along with other markers, can be used to distinguish between reactive and neoplastic T-cells.

CD8 expression has been found to be negative in Mycosis Fungoides. Rarely does anti-CD8 label non-hematolymphoid neoplasms.

Mouse Monoclonal Anti-Human
CD10-MMEP



RCC stained with Anti-CD10

Clone	:	MMEP
Isotype	:	Mouse IgG2b
Reactivity	:	Human, FFPE
Localization	:	Membrane and Cytoplasm
Control	:	Tonsil, Follicular Lymphoma, RCC

Catalog#	Catalog#	Catalog#
PM309-3ml (RTU)	PM309-6ml (RTU)	—
HAM309-3ml (RTU)	HAM309-6ml (RTU)	—
CM309-0.1ml (Conc)	CM309-0.5ml (Conc)	CR278-1ml (Conc)

TE

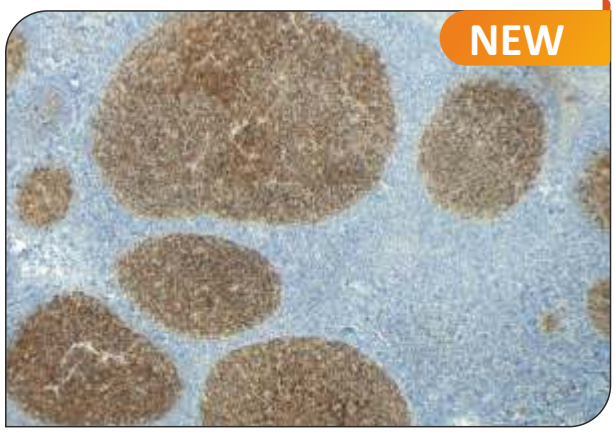
Mouse Monoclonal anti-CD10 (Clone MMEP) primary antibody recognizes the CD10 molecule, or common acute lymphoblastic leukemia antigen (CALLA). This antibody is useful in the characterization of a subset of malignant lymphomas (e.g. precursor B-lymphoblastic lymphoma, follicular center cell lymphoma and Burkitt's lymphoma) in which CD10 is frequently expressed. CD10 may be used as part of a panel of antibodies for differentiation of clear cell or papillary renal carcinoma, in which CD10 is strong expressed in most of these tumors.

E - EDTA BUFFER

TE - TRIS-EDTA BUFFER

C - CITRATE BUFFER

Rabbit Monoclonal Anti-Human
CD10-NEPP



Tonsil stained with Anti-CD10

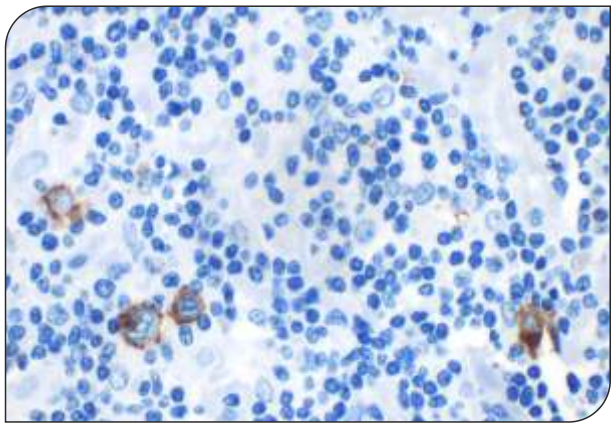
Clone	:	NEPP
Isotype	:	Rabbit, IgG
Reactivity	:	Human, FFPE
Localization	:	Membrane
Control	:	Tonsil, Follicular Lymphoma, RCC

Catalog#	Catalog#	Catalog#
PR352-3ml (RTU)	PR352-6ml (RTU)	—
CR352-0.1ml (Conc)	CR352-0.5ml (Conc)	CR352-1ml (Conc)

TE

CD10 is a single-chain cell surface glycoprotein, also designated as common acute lymphoblastic leukaemia antigen (CALLA), neprilysin and neutral endopeptidase. Besides, CD10 is a zinc dependent peptidase (metalloprotease), degrading various bioactive peptides, and it plays a functional role by modulating cellular responses to peptide substrates. CD10 is present on the cell surface of bone marrow stem cells and myelopoietic cells(including neutrophils), follicular centre cells, few mature B-lymphocytes, and a subpopulation of parafollicular T-lymphocytes. CD10 is also found in enterocytes in the upper part of the intestinal tract(brush border), in liver(bile canaliculi),kidney (glomerular and proximal tubular cells), pulmonary alveolar cells, myoepithelial cells of breast and sweat and salivary glands, prostate glandular cells, placental trophoblastic cells, endometrial stromal cells, some hematopoietic tumors and chronic myelogenous leukemias in lymphoid blast crisis. CD10 is particularly useful in the classification of B-cell leukemias/ lymphomas and classification of carcinomas (identification of hepatocellular carcinoma and renal cell carcinoma). CD10 may be used in the identification of metaplastic breast carcinoma, prognostication of breast carcinoma and classification of uterine mesenchymal neoplasms (identification of stromal sarcoma).

Mouse Monoclonal Anti-Human
CD15-BRA-4F1



Hodgkin's Lymphoma stained with Anti-CD15

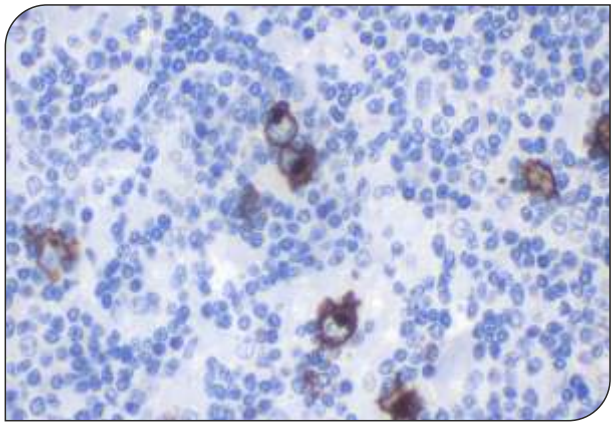
Clone	:	BRA-4F1
Isotype	:	Mouse IgMk
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm and Membrane
Control	:	Hodgkin's Lymphoma

Catalog#	Catalog#	Catalog#
PM111-3ml (RTU)	PM111-6ml (RTU)	—
HAM111-3ml (RTU)	HAM111-6ml (RTU)	—
CM111-0.1ml (Conc)	CM111-0.5ml (Conc)	CM111-1ml (Conc)

TE

CD15 is expressed on Reed-Sternberg cells of Hodgkin's disease and by various other cell types including myeloid cells and epithelial cells. CD15 recognizes a pentasaccharide sequence occurring in lacto-N-fucopentaose III ceramide (also referred to as Xhapten of Lex) found in higher glycolipids and glycoproteins. A review by Arber et al. has reported that antibodies to CD15 demonstrate positive staining in 87% of Hodgkin's disease including nodular sclerosing, mixed cellularity, and lymphocyte depletion, whereas the lymphocyte predominant variant exhibits a lower rate of positivity.

Rabbit Monoclonal Anti-Human
CD15-EP273



Hodgkins Lymphoma stained with Anti-CD15

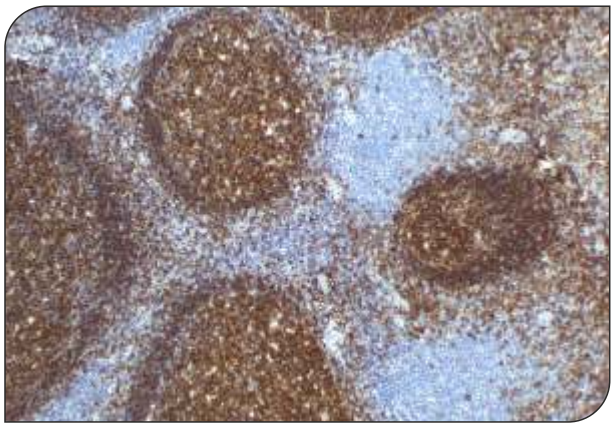
Clone	:	EP273
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm and Membrane
Control	:	Spleen, Hodgkin's Lymphoma, Tonsil

Catalog#	Catalog#	Catalog#
PR168-3ml (RTU)	PR168-6ml (RTU)	—
HAR168-3ml (RTU)	HAR168-6ml (RTU)	—
CR168-0.1ml (Conc)	CR168-0.5ml (Conc)	CR168-1ml (Conc)

TE

CD15 is a complex cluster of cell surface glycoproteins and glycolipids with a common trisaccharide structure, 3-fucosyl-N-acetyl lactosamine (3-FL) also referred to as Lewis X (LeX) antigen. This antigen is involved in neutrophil functions such as, cell-cell interactions, phagocytosis, stimulation of degranulation and respiratory burst. The CD15 is expressed in Reed-Sternberg cells, myeloid cells as well as epithelial cells. CD15 antibody has been used as an immuno-histochemical marker to identify Reed-Sternberg cells (RSC) in Classical Hodgkin's Lymphoma (CHL).

Rabbit Monoclonal Anti-Human
CD19-EP169



Tonsil stained with Anti-CD19

Clone	:	EP169
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Membrane
Control	:	Tonsil, B-Cell Lymphoma

Catalog#	Catalog#	Catalog#
PR109-3ml (RTU)	PR109-6ml (RTU)	—
HAR109-3ml (RTU)	HAR109-6ml (RTU)	—
CR109-0.1ml (Conc)	CR109-0.5ml (Conc)	CR109-1ml (Conc)

TE

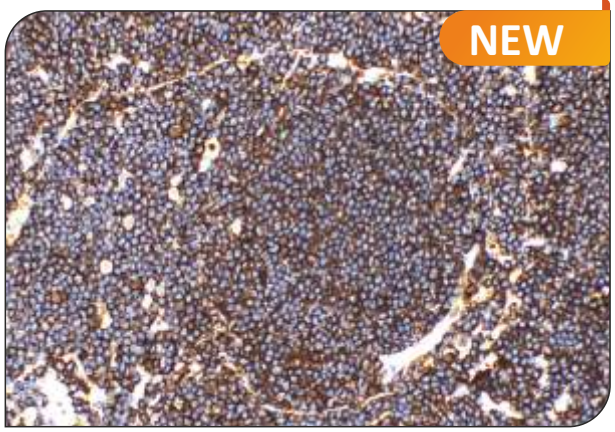
CD19 is a pan B-cell marker expressed in a wide range of maturational stages including pre B-cells. CD19 labels the membrane of B-cells in germinal centers including B-cells and follicular dendritic cells, mantle zone cells and cells in the interfollicular areas. It is negative in plasma cells. CD19 is found in the majority of B-cell derived malignancies.

E -EDTA BUFFER

TE -TRIS-EDTA BUFFER

C -CITRATE BUFFER

Rabbit Monoclonal Anti-Human
CD20-BCAP



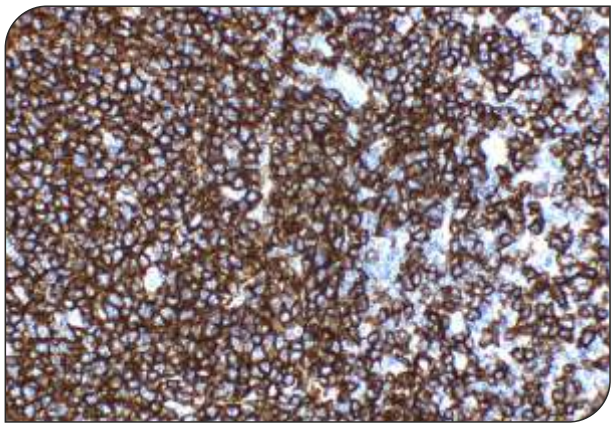
Lymph Node stained with Anti-CD20

Clone	:	BCAP
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Membrane
Control	:	Tonsil, Appendix, Lymph Node

Catalog#	Catalog#	Catalog#
PR333-3ml (RTU)	PR333-6ml (RTU)	—
HAR333-3ml (RTU)	HAR333-6ml (RTU)	—
CR333-0.1ml (Conc)	CR333-0.5ml (Conc)	CR333-1ml (Conc)

TE CD20 is a membrane-embedded 33kDa nonglycosylated phosphoprotein which play a role in B-cell activation, differentiation, and cell-cycle progression. CD20 is a restricted B-cell antigen and its clinical utility is greatest for identifying B-lineage non-Hodgkin's lymphomas, but it can also aid in the diagnosis of nodular lymphocyte predominance Hodgkin's disease and acute lymphoblastic neoplasms.

Mouse Monoclonal Anti-Human
CD20-L26



Follicular Lymphoma stained with Anti-CD20

Clone	:	L26
Isotype	:	Mouse IgG2a
Reactivity	:	Human, FFPE
Localization	:	Membrane
Control	:	Tonsil, Follicular Lymphoma

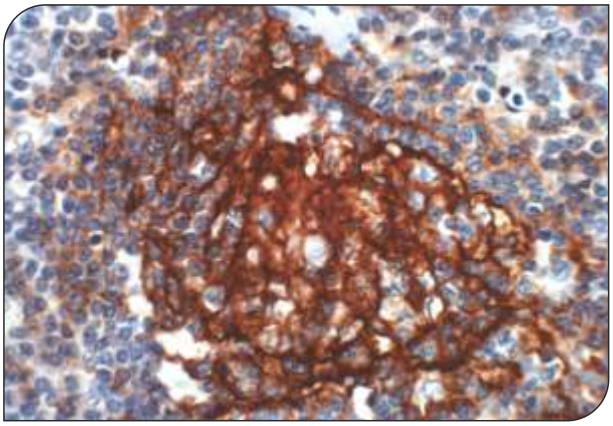
Catalog#	Catalog#	Catalog#
PM080-3ml (RTU)	PM080-6ml (RTU)	—
HAM080-3ml (RTU)	HAM080-6ml (RTU)	—
CM080-0.1ml (Conc)	CM080-0.5ml (Conc)	CM080-1ml (Conc)

C CD20 is expressed on B-cell precursors and mature B- cells, but is lost in plasma cells. CD20 is almost always expressed in B-cell lymphomas of small cell type, prolymphocytic leukemia, follicular center cell lymphomas, large or small cell types of both diffuse and follicular patterns, monocytoid lymphomas, mantle cell lymphomas, hairy cell leukemias/lymphomas and immunoblastic lymphomas. Clone L26 is the most commonly used of the CD20 antibodies. This antibody has been one of the most important tools in diagnostic pathology for the diagnosis of B-cell neoplasms.

Rabbit Monoclonal Anti-Human
CD21-EP64

TE · E

CD21 is a single pass type 2 transmembrane protein that serves as the complement receptor for C3d and the EpsteinBarr virus. CD21 antibody labels follicular dendritic cells and mature B cells particularly in marginal and mantle zone of lymphoid tissues. It is a useful marker to identify neoplasms derived from follicular dendritic cells.



Lymphoma stained with Anti-CD21

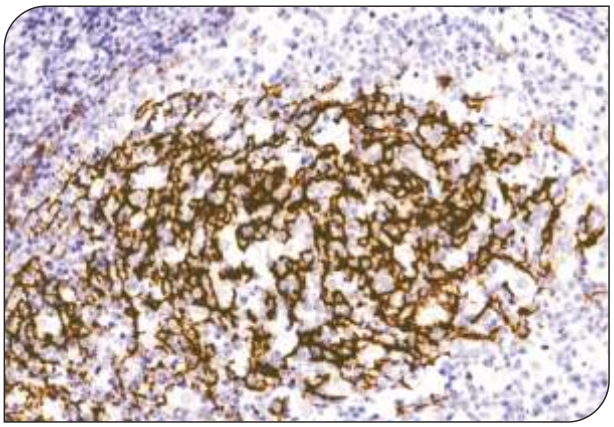
Clone	:	EP64
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Membrane
Control	:	Tonsil, Lymphoma

Catalog#	Catalog#	Catalog#
PR141-3ml (RTU)	PR141-6ml (RTU)	—
HAR141-3ml (RTU)	HAR141-6ml (RTU)	—
CR141-0.1ml (Conc)	CR141-0.5ml (Conc)	CR141-1ml (Conc)

Rabbit Monoclonal Anti-Human
CD23-EP75

TE

CD23, a type II transmembrane glycoprotein, is a key molecule for B-cell activation and growth functions as a receptor for IgE. CD23 antibody labels activated B-cells expressing IgM/IgD and follicular dentritic cells. In tumors, CD23 antibody is helpful in identification of B-cell chronic lymphocytic leukemia (CLL), follicular dendritic cell tumors, and mediastinal large B-cell lymphoma. In addition, anti-CD23 is useful to differentiate CLL from mantle cell lymphoma which is CD23 negative.

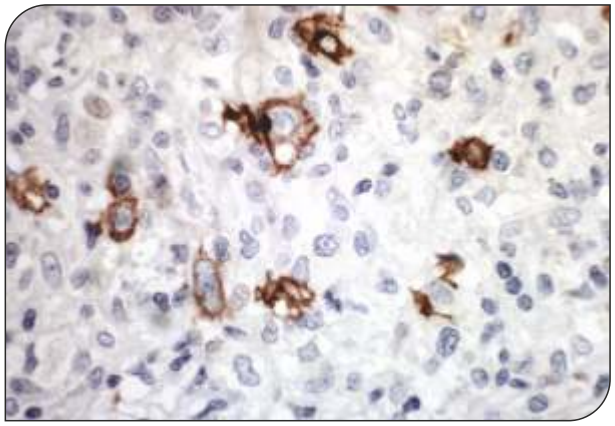


Tonsil stained with Anti-CD23

Clone	:	EP75
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Membrane
Control	:	B-Cell Chronic Lymphocytic Leukemia, Tonsil

Catalog#	Catalog#	Catalog#
PR019-3ml (RTU)	PR019-6ml (RTU)	—
HAR019-3ml (RTU)	HAR019-6ml (RTU)	—
CR019-0.1ml (Conc)	CR019-0.5ml (Conc)	CR019-1ml (Conc)

Mouse Monoclonal Anti-Human
CD30-Ber-H2



Lymph Node stained with Anti-CD30

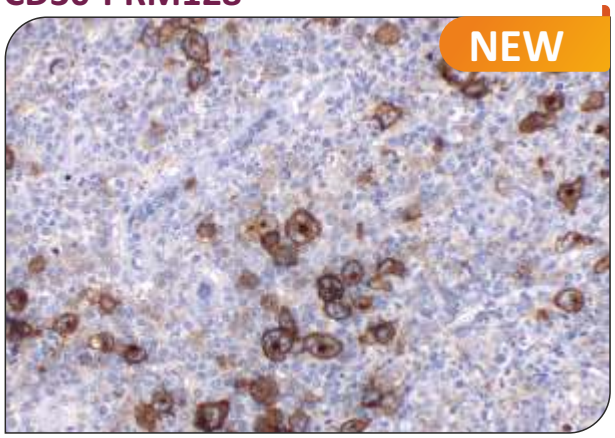
Clone	:	Ber-H2
Isotype	:	Mouse IgG1k
Reactivity	:	Human, FFPE
Localization	:	Membrane
Control	:	Lymph Node, Hodgkins Lymphoma

Catalog#	Catalog#	Catalog#
PM081-3ml (RTU)	PM081-6ml (RTU)	—
HAM081-3ml (RTU)	HAM081-6ml (RTU)	—
CM081-0.1ml (Conc)	CM081-0.5ml (Conc)	CM081-1ml (Conc)

TE

This antibody labels anaplastic large cell lymphoma (ALCL) and Reed-Sternberg cells. It is a useful tool for the identification of ALCL and as a secondary marker for Hodgkin's disease. CD30 antigen is also expressed in other abnormal tissues such as embryonal carcinomas and mesenchymal tumors.

Rabbit Monoclonal Anti-Human
CD30-PRM128



Hodgkin's Lymphoma stained with Anti-CD30

Clone	:	PRM128
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Membrane and Cytoplasm
Control	:	Tonsil, Hodgkin's Lymphoma, Lymph Node

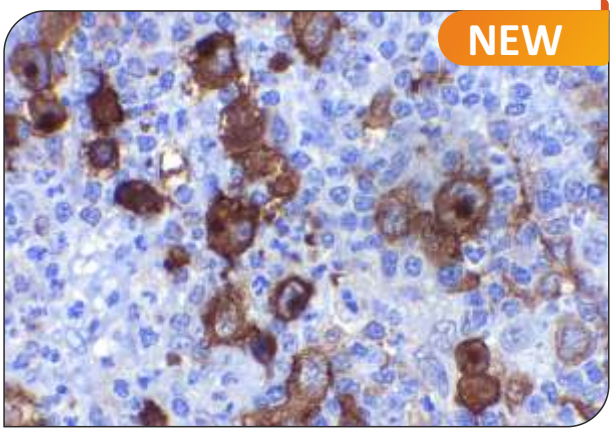
Catalog#	Catalog#	Catalog#
PR331-3ml (RTU)	PR331-6ml (RTU)	—
HAR331-3ml (RTU)	HAR331-6ml (RTU)	—
CR331-0.1ml (Conc)	CR331-0.5ml (Conc)	CR331-1ml (Conc)

TE

CD30 is a transmembrane cytokine receptor belonging to the tumor necrosis factor (TNF) receptor super- family. Mature CD30 has a molecular mass of 120 kDa and is derived from a 90 kDa precursor protein.

CD30 antibody detects an epitope which is expressed by Reed-Sternberg cells in Hodgkin's Disease, the majority of Anaplastic Large-cell Lymphomas, and in Embryonal Carcinomas and Seminomas. This antibody also stains plasma cells intensely in paraffin-embedded tissue.

Rabbit Monoclonal Anti-Human
CD30-TRA30P



Hodgkin's Lymphoma stained with Anti-CD30

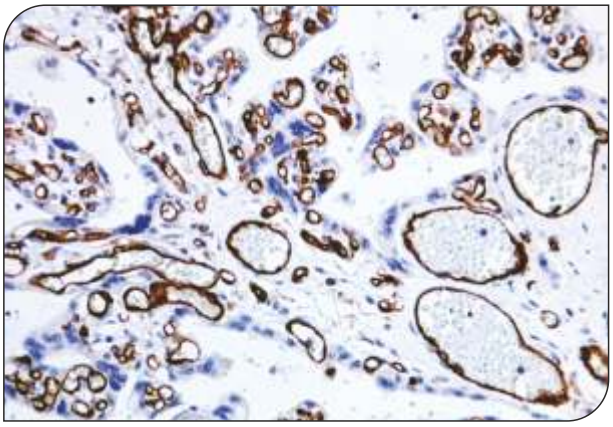
Clone	:	TRA30P
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Membrane
Control	:	Hodgkin's Lymphoma, Tonsil

Catalog#	Catalog#	Catalog#
PR305-3ml (RTU)	PR305-6ml (RTU)	—
HAR305-3ml (RTU)	HAR305-6ml (RTU)	—
CR305-0.1ml (Conc)	CR305-0.5ml (Conc)	CR305-1ml (Conc)

TE

CD30, TNF- receptor super family member, is a receptor for TNFSF8/CD30L. TRAF2 and TRAF5 can interact with this receptor and mediate the signal transduction that leads to the activation of NF-kappa B. This receptor is a positive regulator of apoptosis, and it also has been shown to limit the proliferative potential of auto reactive CD8 effector T-cells and protect the body against autoimmunity. CD30 is expressed in mononuclear Hodgkin's and multinucleated Reed-Sternberg cells in Hodgkin's disease, in tumor cells of a majority of anaplastic large cell lymphomas, in a varying proportion of activated T and B-cells. In non-lymphoid malignancies, CD30 reactivity has been reported in embryonal carcinomas, seminomas and hepatocellular carcinomas. This antibody has been useful in identifying Hodgkin's lymphoma, anaplastic large cell lymphoma (ALCL) and primary cutaneous CD30+ T-cell lymphoproliferative disorders.

Rabbit Monoclonal Anti-Human
CD31-EP78



Placenta stained with Anti-CD31

Clone	:	EP78
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Membrane
Control	:	Placenta, Angiosarcoma, Tonsil

Catalog#	Catalog#	Catalog#
PR021-3ml (RTU)	PR021-6ml (RTU)	—
HAR021-3ml (RTU)	HAR021-6ml (RTU)	—
CR021-0.1ml (Conc)	CR021-0.5ml (Conc)	CR021-1ml (Conc)

TE

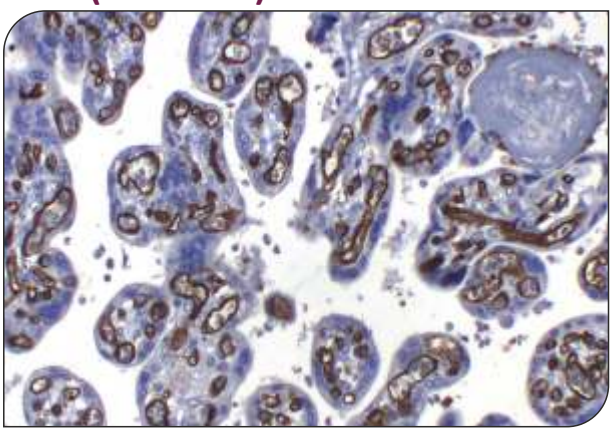
CD31, also known as PECAM-1, is a 130 kDa integral membrane glycoprotein found on the surface of endothelial cells, platelets, and some hematopoietic cells. The antibody labels endothelial cells of arteries, arterioles, venules, veins, and non-sinusoidal capillaries in various tissues. CD31 is the most sensitive and specific endothelial cell marker. It is useful for detection of tumors with endothelial origin. In addition, CD31 has been used to identify vascular invasion of tumors, and assessment of angiogenesis, which is a prognostic marker for many types of cancer.

E - EDTA BUFFER

TE - TRIS-EDTA BUFFER

C - CITRATE BUFFER

Mouse Monoclonal Anti-Human
CD31(PECAM-1)-GM006



Placenta stained with Anti-CD31(PECAM-1)

Clone	:	GM006
Isotype	:	Mouse IgG1
Reactivity	:	Human, FFPE
Localization	:	Membrane
Control	:	Lymph Node, Tonsil, Angiosarcoma, Placenta

Catalog#	Catalog#	Catalog#
PM082-3ml (RTU)	PM082-6ml (RTU)	—
HAM082-3ml (RTU)	HAM082-6ml (RTU)	—
CM082-0.1ml (Conc)	CM082-0.5ml (Conc)	CM082-1ml (Conc)

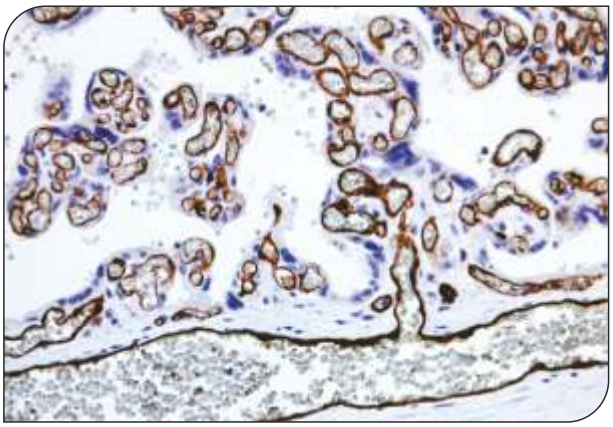
TE

CD31 (also named platelet/endothelial cell adhesion molecule 1-PECAM-1) is expressed on endothelial cells and circulating and tissue-phase hematopoietic cells. This antibody is a useful tool for the identification of vascular disorders (Eg.angiosarcoma) and determination of angiogenesis in some tumors.

Positive results aid in the classification of benign and malignant human vascular disorders. Differentiation identification is aided by the results from a panel of antibodies. CD31 is useful as part of the panel for the identification of epithelioid and spindled tumors in the skin and soft tissue.

Rabbit Monoclonal Anti-Human
CD34-EP88

C TE



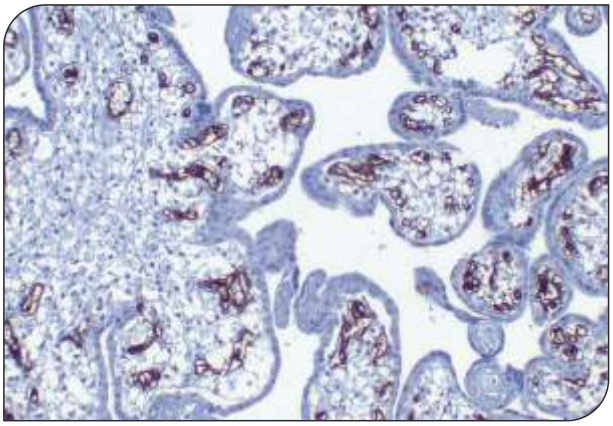
Placenta stained with Anti-CD34

Clone	:	EP88
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Membrane
Control	:	Placenta, Angiosarcoma, Tonsil, GIST

Catalog#	Catalog#	Catalog#
PR022-3ml (RTU)	PR022-6ml (RTU)	—
HAR022-3ml (RTU)	HAR022-6ml (RTU)	—
CR022-0.1ml (Conc)	CR022-0.5ml (Conc)	CR022-1ml (Conc)

CD34 (Cluster of differentiation 34) is a single pass type I transmembrane glycoprotein which primary functions as a cell-to-cell adhesion factor. As an adhesion factor, CD34 is expressed during stem/progenitor stage of lymphohematopoietic development and possibly mediates the stem cell attachment to the bone marrow, ECM or stromal cells. CD34 is expressed on hematopoietic stem/progenitor cells, endothelial cells, fibroblasts, and other stromal components. CD34 is an important marker for quantifying and purifying hematopoietic progenitor/stem cells. It is useful in identification of tumors with endothelial or lymphoid differentiation. In addition, CD34 aids in detection of gastrointestinal stromal tumors.

Mouse Monoclonal Anti-Human
CD34-Qbend10



Placenta stained with Anti-CD34

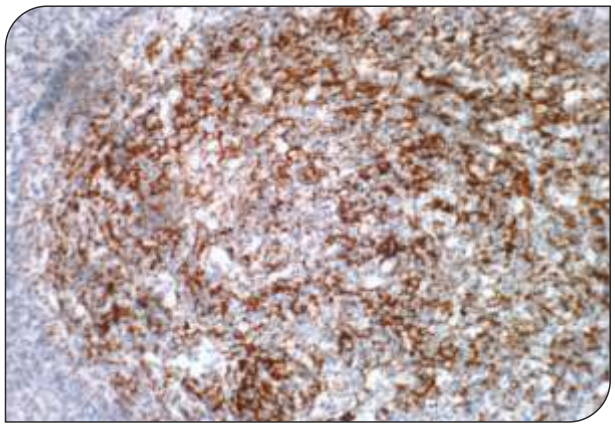
Clone	:	Qbend10
Isotype	:	Mouse IgG1
Reactivity	:	Human, FFPE
Localization	:	Membrane
Control	:	Tonsil, GIST, Placenta, Angiosarcoma

Catalog#	Catalog#	Catalog#
PM083-3ml (RTU)	PM083-6ml (RTU)	—
HAM083-3ml (RTU)	HAM083-6ml (RTU)	—
CM083-0.1ml (Conc)	CM083-0.5ml (Conc)	CM083-1ml (Conc)

TE

CD34 is expressed on immature hematopoietic stem/progenitor cells, capillary endothelial cells, embryonic fibroblasts and rare glial cells in nervous tissue. The antibody is a useful tool for the identification of vascular (angiosarcoma, Kaposi's sarcoma, epitheliod hemangio pericytoma, hemangioma) and lymphatic tumors, for the subclassification of leukemias, and for diagnosis of the gastrointestinal stromal tumor (GIST) along with anti-CD117 (c- kit) and S-100 antibodies.

Rabbit Monoclonal Anti-Human
CD35-EP197



Tonsil stained with Anti-CD35

Clone	:	EP197
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Membrane
Control	:	Tonsil, Follicular Dendritic Cell Sarcoma

Catalog#	Catalog#	Catalog#
PR235-3ml (RTU)	PR235-6ml (RTU)	—
HAR235-3ml (RTU)	HAR235-6ml (RTU)	—
CR235-0.1ml (Conc)	CR235-0.5ml (Conc)	CR235-1ml (Conc)

TE

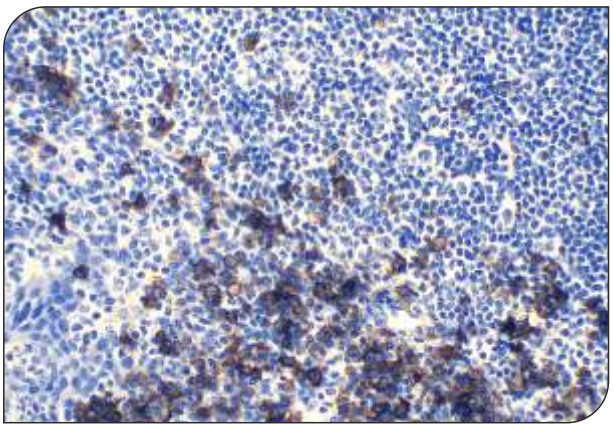
CD35, also named as erythrocyte complement receptor 1 (CR1), is a member of the complement activation (RCA) family and is located in the cluster RCA region of chromosome 1. CD35 mediates cellular binding to particles and immune complexes that have activated complement. CD35 is present on erythrocytes, various leucocytes and renal glomerular podocytes. In addition, plasma contains a soluble form of CR1 (Scr1). CD35 also can be detected on follicular dendritic cells. It is a marker for the diagnosis of follicular dendritic cell sarcoma. This antibody labels dendritic cells in tonsil and spleen and glomerular podocytes in kidney.

E -EDTA BUFFER

TE -TRIS-EDTA BUFFER

C -CITRATE BUFFER

Rabbit Monoclonal Anti-Human
CD38-EP135



Tonsil stained with Anti-CD38

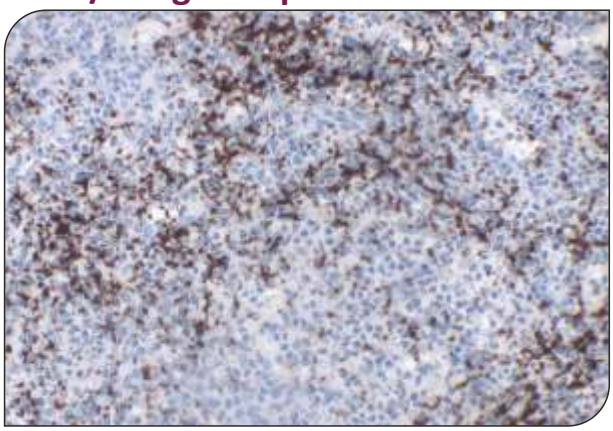
Clone	:	EP135
Isotype	:	Rabbit IgG
Reactivity	:	Human FFPE
Localization	:	Membrane
Control	:	Tonsil, Lymphoma

Catalog#	Catalog#	Catalog#
PR129-3ml (RTU)	PR129-6ml (RTU)	—
HAR129-3ml (RTU)	HAR129-6ml (RTU)	—
CR129-0.1ml (Conc)	CR129-0.5ml (Conc)	CR129-1ml (Conc)

TE

CD38, also called ADP ribosyl cyclase, is an ectoenzyme that uses nicotinamide adenine dinucleotide (NAD) as a substrate to generate second IVD messengers. In particular, it synthesizes cyclic ADP ribose, a second messenger for glucose induced insulin secretion. CD38 also has cADPR hydrolase activity. It is preferentially expressed at both early and late stages of B and T-cell maturation. CD38 is expressed in a variety of non- hematopoietic and hematopoietic cells, the latter comprising early bone marrow progenitor cells, thymic cells, natural killer cells, activated T-cells, and B-cells at early and late stages of differentiation, such as plasma cells. In normal lymph nodes and tonsils, the antigen is detected mainly on B-cells in germinal centers and plasma cells.

Rabbit Monoclonal Anti-Human
CD41/Integrin Alpha IIb-EP178



Spleen stained with Anti-CD41/Integrin Alpha IIb

Clone	:	EP178
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm and Membrane
Control	:	Spleen

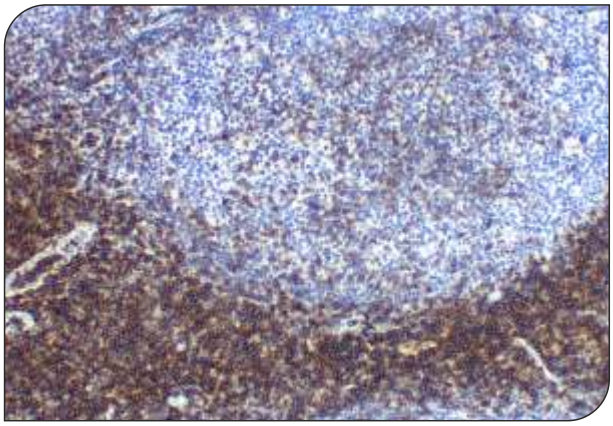
Catalog#	Catalog#	Catalog#
PR249-3ml (RTU)	PR249-6ml (RTU)	—
HAR249-3ml (RTU)	HAR249-6ml (RTU)	—
CR249-0.1ml (Conc)	CR249-0.5ml (Conc)	CR249-1ml (Conc)

TE

CD41, also named GPIIb, is a protein that in human is encoded by the ITGA2B gene. This protein can be associated with GPIIIa to form a heterodimer complex (GPIIb-IIIa) in the presence of Ca2+. This complex can bind one of four different adhesive proteins (i.e fibrinogen, fibronectin, von Willebrand factor [VWF], or vitronectin). CD41 expression has been found on platelets, megakaryocytes, and more recently, on immature hematopoietic progenitors. CD41 is a reliable marker of early steps of hematopoiesis during ES cell differentiation. CD41 has been used as a marker for megakaryocytic differentiation.

Mouse Monoclonal Anti-Human

CD43-DF-T1



Tonsil stained with Anti-CD43

Clone	:	DF-T1
Isotype	:	Mouse IgG1k
Reactivity	:	Human, FFPE
Localization	:	Membrane
Control	:	Tonsil, Lymph Node, CLL/SLL

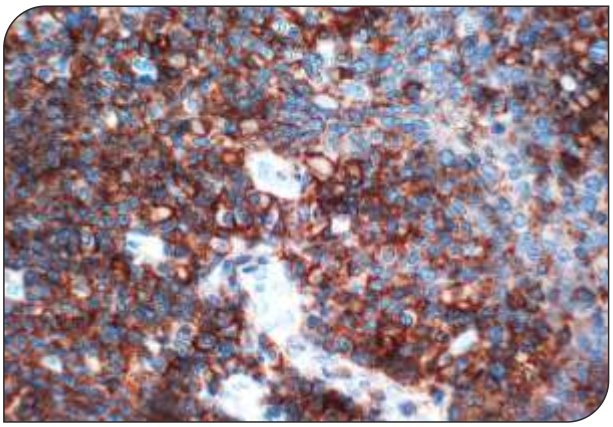
Catalog#	Catalog#	Catalog#
PM154-3ml (RTU)	PM154-6ml (RTU)	—
HAM154-3ml (RTU)	HAM154-6ml (RTU)	—
CM154-0.1ml (Conc)	CM154-0.5ml (Conc)	CM154-1ml (Conc)

C

CD43 (leukosialin, sialophorin, or leukocyte sialoglycoprotein) is a cell surface glycoprotein which is expressed on all thymocytes and T-cells. CD43 is involved in activation of T- cells, B-cells, NK cells, and monocytes.

Rabbit Monoclonal Anti-Human

CD44-EP44



Breast Ca stained with Anti-CD44

Clone	:	EP44
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Membrane
Control	:	Breast Ca, Tonsil

Catalog#	Catalog#	Catalog#
PR155-3ml (RTU)	PR155-6ml (RTU)	—
HAR155-3ml (RTU)	HAR155-6ml (RTU)	—
CR155-0.1ml (Conc)	CR155-0.5ml (Conc)	CR155-1ml (Conc)

TE

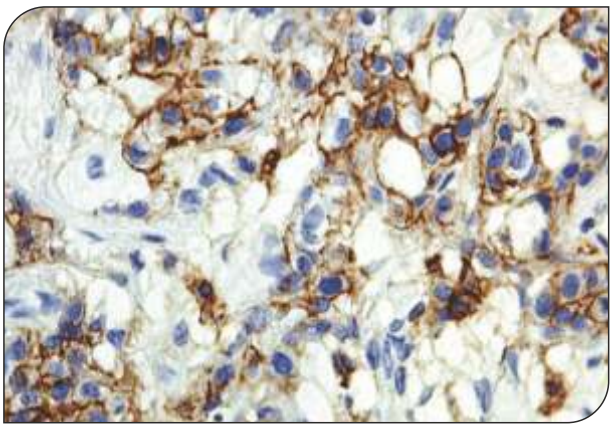
CD44 is a cell surface glycoprotein postulated to play a role in a variety of biological processes, including cell to cell and cell to matrix adhesion, lymphocyte homing and tumor cell metastasis. Several isoforms of CD44 have been identified in human cells, and the genesis of some of these isoforms has been attributed to alternative splicing. Understanding of mechanisms regulating CD44 alternative splicing may provide insights into diverse processes, including tumor cell metastasis and lymphocyte homing. CD44 is widely expressed on many types of cells with mesodermal and hematopoietic origin, epithelial cells and a variety of tumors derived from these cells. Loss of CD44 expression has been linked to tumor invasion, metastasis and progression in carcinomas of breast, prostate, lung, ovary and malignant melanoma.

E - EDTA BUFFER

TE - TRIS-EDTA BUFFER

C - CITRATE BUFFER

Mouse Monoclonal Anti-Human
CD44-HCAM/918



Uterus stained with Anti-CD44

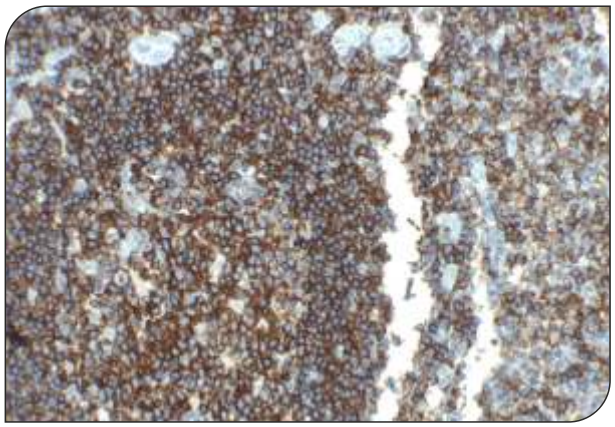
Clone	:	HCAM/918
Isotype	:	Mouse IgG2a,k
Reactivity	:	Human, FFPE
Localization	:	Membrane
Control	:	Tonsil, Thymus, Uterus

Catalog#	Catalog#	Catalog#
PM287-3ml (RTU)	PM287-6ml (RTU)	—
HAM287-3ml (RTU)	HAM287-6ml (RTU)	—
CM287-0.1ml (Conc)	CM287-0.5ml (Conc)	CM287-1ml (Conc)

TE

Recognizes a cell surface glycoprotein of 80-95kDa (CD44) on lymphocytes, monocytes and granulocytes (Leucocyte Typing Workshop V). Its epitope is resistant to digestion by trypsin and chymotrypsin. The CD44 family of glycoproteins exists in a number of variant isoforms, the most common being the standard 85-95kDa or hematopoietic variant (CD44s). Higher molecular weight isoforms are described in epithelial cells (CD44v), which are believed to function in intercellular adhesion and stromal binding. CD44 immunostaining is commonly used for the discrimination of urothelial transitional cell carcinoma in-situ from non-neoplastic changes in the urothelium.

Rabbit Monoclonal Anti-Human
CD45-EP68



Tonsil stained with Anti-CD45

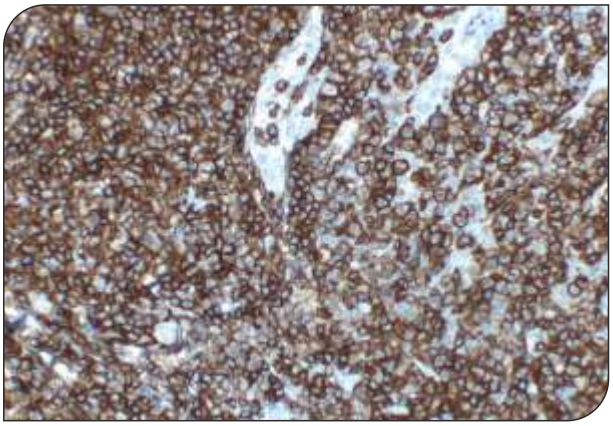
Clone	:	EP68
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Membrane/ Cytoplasm
Control	:	Tonsil, Lymphoma, Lymph Node

Catalog#	Catalog#	Catalog#
PR023-3ml (RTU)	PR023-6ml (RTU)	—
HAR023-3ml (RTU)	HAR023-6ml (RTU)	—
CR023-0.1ml (Conc)	CR023-0.5ml (Conc)	CR023-1ml (Conc)

C

CD45, also known as the leukocyte common antigen (LCA), is a transmembrane protein tyrosine phosphatase (PTPase) that is expressed in almost all hematolymphoid cells including lymphocytes, granulocytes, monocytes and macrophage, but not in mature erythrocytes and megakaryocytes. CD45 antibody labelling of majority of hematolymphoid neoplasms, is a first line of marker for the identification of tumors with hematopoietic origin. Rare cases of undifferentiated and neuroendocrine carcinomas with CD45 positive staining have been reported.

Mouse Monoclonal Anti-Human
CD45RB(LCA)-2B11/PD7-26



Tonsil stained with Anti-CD45RB(LCA)

Clone	:	2B11/PD7-26
Isotype	:	Mouse (IgG1/k+IgG1/k)
Reactivity	:	Human, FFPE
Localization	:	Membrane
Control	:	Spleen, Tonsil, Lymphoma, Lymph Node

Catalog#	Catalog#	Catalog#
PM121-3ml (RTU)	PM121-6ml (RTU)	—
HAM121-3ml (RTU)	HAM121-6ml (RTU)	—
CM121-0.1ml (Conc)	CM121-0.5ml (Conc)	CM121-1ml (Conc)

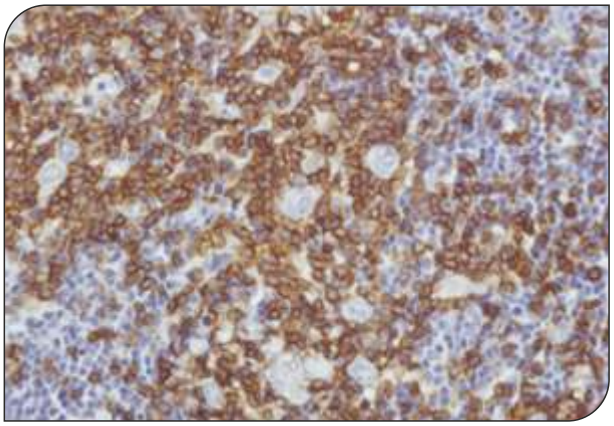
TE

CD45 leukocyte common antigen (LCA) belongs to the family of at least four isoforms of membrane glycoproteins (220, 205, 190, 180kDa) expressed on hematopoietic cell lines but absent on non-hematopoietic cell lines, normal and malignant non-hematopoietic tissues. The intracellular portion of these molecules has protein phosphatase activity and is involved in regulation of transmembrane signals. Antibody to CD45 is useful in differential identification of lymphoid tumors from non-hematopoietic undifferentiated neoplasms.

Mouse Monoclonal Anti-Human
CD45RO-UCHL-1

TE C

This antibody mainly recognizes the 180 kD (O isoform-CD45RO) variant of CD45, Leucocyte Common Antigen (LCA). It labels most T lymphocytes, macrophages and Langerhan's cells of normal tissue. It is a useful tool for identifying T-cell lymphomas and for the differentiation of low grade B-cell from T-cell lymphomas.

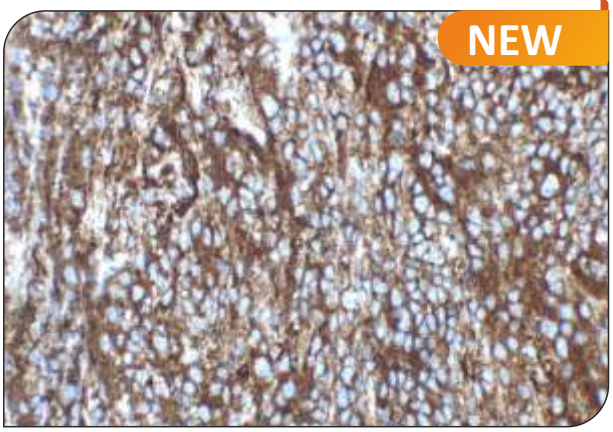


Hodgkin's Lymphoma stained with Anti-CD45RO

Clone	:	UCHL-1
Isotype	:	Mouse IgG2a
Reactivity	:	Human, FFPE
Localization	:	Membrane
Control	:	Hodgkins Lymphoma, Tonsil

Catalog#	Catalog#	Catalog#
PM084-3ml (RTU)	PM084-6ml (RTU)	—
HAM084-3ml (RTU)	HAM084-6ml (RTU)	—
CM084-0.1ml (Conc)	CM084-0.5ml (Conc)	CM084-1ml (Conc)

Rabbit Monoclonal Anti-Human
CD56-PRM123



Brain Ca stained with Anti-CD56

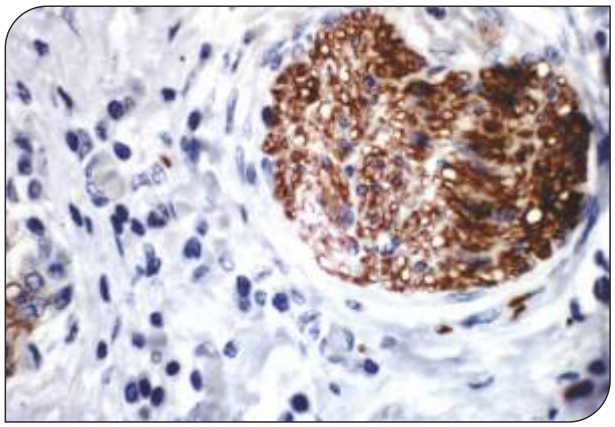
Clone	:	PRM123
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Membrane and Cytoplasm
Control	:	Neuroblastoma, Plasmacytoma, Brain Ca

Catalog#	Catalog#	Catalog#
PR325-3ml (RTU)	PR325-6ml (RTU)	—
HAR325-3ml (RTU)	HAR325-6ml (RTU)	—
CR325-0.1ml (Conc)	CR325-0.5ml (Conc)	CR325-1ml (Conc)

TE

CD56, also known as neural cell adhesion molecule (NCAM), is a calcium-independent homophilic binding protein that belongs to a group of cell adhesion molecules including cadherins, selectins, and integrins.CD56 is involved in cell–cell adhesion of neural cells during embryogenesis and is expressed on most neuroectodermally derived tissues. In normal tissue, anti-CD56 labels neurons, glia, schwann cells, NK (natural killer) cells, and a subset of T-cells.CD56 expression can be seen in most NK cell neoplasms, certain subtypes of T-cell lymphoma and in some plasma cell neoplasms.

Mouse Monoclonal Anti-Human
CD56-123C3



Pancreas stained with Anti-CD56

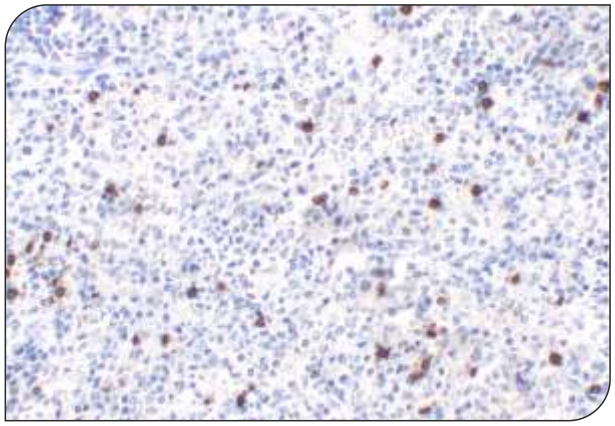
Clone	:	123C3
Isotype	:	Mouse IgG1
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm and Membrane
Control	:	Small Cell Lung Ca, Pancreas, Neuroblastoma

Catalog#	Catalog#	Catalog#
PM085-3ml (RTU)	PM085-6ml (RTU)	—
HAM085-3ml (RTU)	HAM085-6ml (RTU)	—
CM085-0.1ml (Conc)	CM085-0.5ml (Conc)	CM085-1ml (Conc)

TE

This antibody recognizes two proteins of the neural cell adhesion molecule (NCAM), the basic molecule expressed on most neuroectodermally derived cell lines, tissues and neoplasms. This antibody is useful for the identification of natural killer (NK) cells, NK like T-cells, neural/ neuroendocrine tissues and related neoplasms. The antibody labels NK cells and a subset of CD4+ and CD8+ T- cells in peripheral blood. Outside the hematopoietic system, CD56 is expressed in a number of tumors, including neuroblastomas and small cell lung cancer (SCLC).

Mouse Monoclonal Anti-Human
CD57-NK1



Spleen stained with Anti-CD57

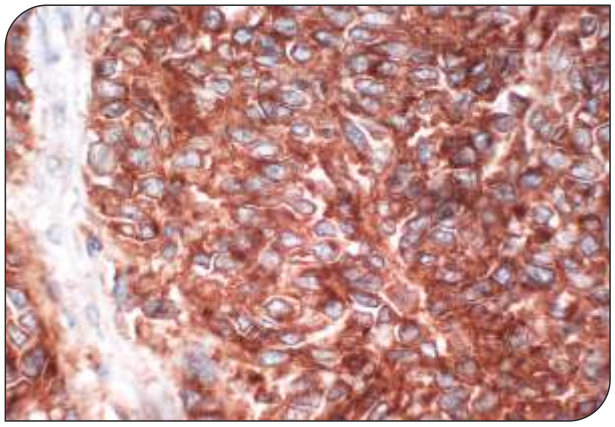
Clone	:	NK1
Isotype	:	Mouse IgM/k
Reactivity	:	Human, FFPE
Localization	:	Membrane
Control	:	Tonsil, Spleen, Schwannomas, Neuroendocrine Tumors

Catalog#	Catalog#	Catalog#
PM161-3ml (RTU)	PM161-6ml (RTU)	—
HAM161-3ml (RTU)	HAM161-6ml (RTU)	—
CM161-0.1ml (Conc)	CM161-0.5ml (Conc)	CM161-1ml (Conc)

TE

The CD57 glycoprotein, also known as HNK-1, has a molecular weight of 110 kD. It is found on a subset of mononuclear cells with natural killer activity and on neuroectodermal cells expressing myelin associated glycoprotein. Many cells which co-express CD57 and CD8 proteins are a subset of suppressor/cytotoxic T-cells. These cells play a role in the rejection of grafts in acute graft versus host disease. The CD57 molecule is not expressed on erythrocytes or platelets.

Rabbit Monoclonal Anti-Human
CD63-EP211



Melanoma stained with Anti-CD63

Clone	:	EP211
Isotype	:	Rabbit, IgG
Reactivity	:	Human, FFPE
Localization	:	Membrane or Cytoplasm
Control	:	Spleen, Melanoma, Tonsil

Catalog#	Catalog#	Catalog#
PR024-3ml (RTU)	PR024-6ml (RTU)	—
HAR024-3ml (RTU)	HAR024-6ml (RTU)	—
CR024-0.1ml (Conc)	CR024-0.5ml (Conc)	CR024-1ml (Conc)

TE

CD63 is a 53 kD a lysosomal membrane glycoprotein that has been identified as a platelet activation molecule that belongs to the tetraspanin family, which is characterized by the presence of four hydrophobic domains. CD63 can mediate signal transduction events that play a role in the regulation of cellular adhesion, cell differentiation, migration, carcinogenesis and tumor progression.

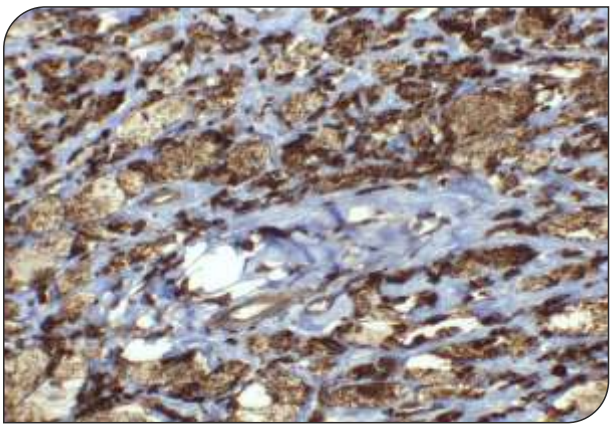
CD63 shows a broad tissue distribution and is predominantly localized in cytoplasmic lysosomes. It is mainly present on platelet lysosomes, granulocytes, basophils and a small percentage of resting T cells, while it is also strongly expressed in early melanoma, breast carcinoma, merkel cell carcinoma, astrocytoma and lung adenocarcinoma. Recent reports also indicate that CD63 is a good prognostic biomarker for human astrocytomas and earlier stages of lung carcinoma. Additionally, CD63 has been useful in differentiating renal oncocytomas (RO) from eosinophilic variants of chromophobe renal cell carcinomas (RCCs).

E - EDTA BUFFER

TE - TRIS-EDTA BUFFER

C - CITRATE BUFFER

Mouse Monoclonal Anti-Human
CD68-KP1



Giant Cell Tumor of Tendon Sheath stained with Anti-CD68

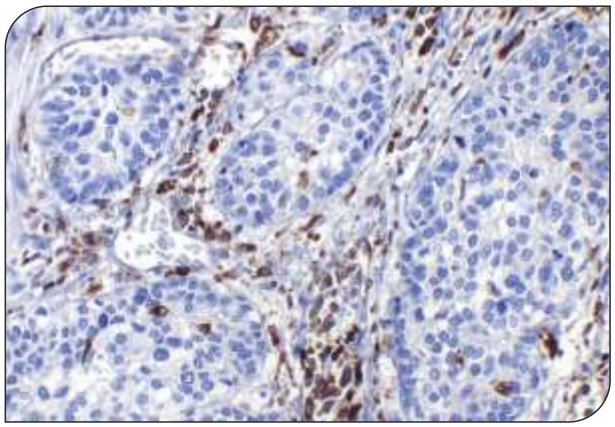
Clone	:	KP1
Isotype	:	Mouse IgG1/k
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Tonsil, Spleen, Lymph Node, Giant Cell Tumor of Tendon Sheath

Catalog#	Catalog#	Catalog#
PM113-3ml (RTU)	PM113-6ml (RTU)	—
HAM113-3ml (RTU)	HAM113-6ml (RTU)	—
CM113-0.1ml (Conc)	CM113-0.5ml (Conc)	CM113-1ml (Conc)

E TE CD68 is expressed on macrophages and monocytes. KP-1 is important for identifying macrophages in tissue sections. It stains macrophages in a wide variety of human tissues, including Kupffer cells and macrophages in the red pulp of the spleen, in lamina propria of the gut, in lung alveoli, and in bone marrow. KP-1 reacts with myeloid precursors and peripheral blood granulocytes. It also reacts with plasmacytoid T-cells which are supposed to be of monocyte /macrophage origin.

It shows strong granular cytoplasmic staining of chronic and acute myeloid leukemia and also reacts with rare cases of true histiocytic neoplasia.

Rabbit Monoclonal Anti-Human
CD74-EP167



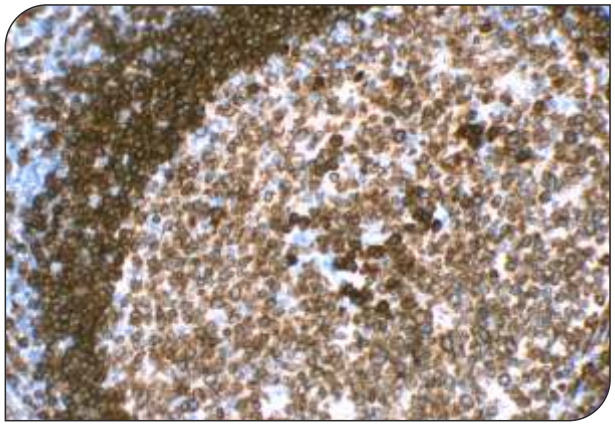
Tonsil stained with Anti-CD74

Clone	:	EP167
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Membrane or Cytoplasm
Control	:	Tonsil

Catalog#	Catalog#	Catalog#
PR025-3ml (RTU)	PR025-6ml (RTU)	—
HAR025-3ml (RTU)	HAR025-6ml (RTU)	—
CR025-0.1ml (Conc)	CR025-0.5ml (Conc)	CR025-1ml (Conc)

E CD74 is a type II transmembrane protein. In normal tissues, CD74 is expressed in B-cells, monocytes, macrophages, Langerhans cells, dendritic cells, subsets of activated T-cells, and thymic epithelium. Under inflammatory conditions, CD74 expression may be observed in endothelial and certain epithelial cells. CD74 expression has been observed in ~90% of B-cell cancers evaluated, as well as the majority of cell lines derived from these cancers. CD74 is a marker for distinguishing atypical fibroxanthoma from malignant fibrous histiocytoma and it is also a useful marker for distinguishing leiomyosarcoma from leiomyoma.

Rabbit Monoclonal Anti-Human
CD79a-EP82



Tonsil stained with Anti-CD79a

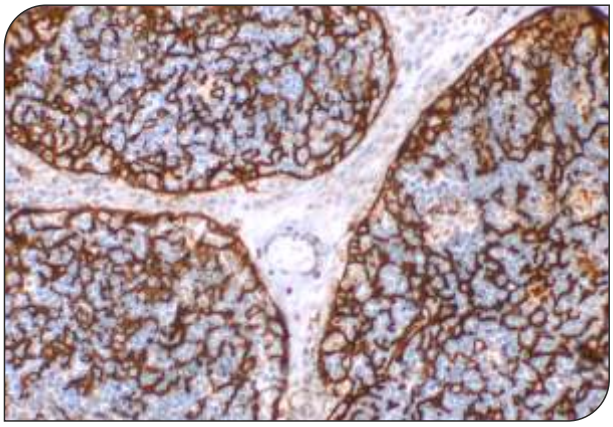
Clone	:	EP82
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Membrane or Cytoplasm
Control	:	Tonsil, B-Cell Lymphoma

Catalog#	Catalog#	Catalog#
PR026-3ml (RTU)	PR026-6ml (RTU)	—
HAR026-3ml (RTU)	HAR026-6ml (RTU)	—
CR026-0.1ml (Conc)	CR026-0.5ml (Conc)	CR026-1ml (Conc)

TE

CD79 consists of two proteins: CD79a (mb-1) and CD79b (B29). CD79a recognizes the Ig-alpha protein, and CD79b recognizes the Ig-beta protein of the B-cell antigen component of the B-lymphocyte antigen receptor. The expression of CD79 precedes immunoglobulin (Ig) gene, heavy chain gene rearrangement and CD20 expression. In precursor B-cells, the CD79 protein chains are already expressed in the cytoplasm (CyCD79). Surface expression of CD79 begins at the pro B-cell stage and persists throughout the B-cell differentiation, and continues presents on plasma cells. CD79a is an excellent marker for identification of normal and neoplastic B-lymphocytes.

Rabbit Monoclonal Anti-Human
CD90-EP56



Thymus stained with Anti-CD90

Clone	:	EP56
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Membrane or Cytoplasm
Control	:	Thymus

Catalog#	Catalog#	Catalog#
PR301-3ml (RTU)	PR301-6ml (RTU)	—
HAR301-3ml (RTU)	HAR301-6ml (RTU)	—
CR301-0.1ml (Conc)	CR301-0.5ml (Conc)	CR301-1ml (Conc)

TE

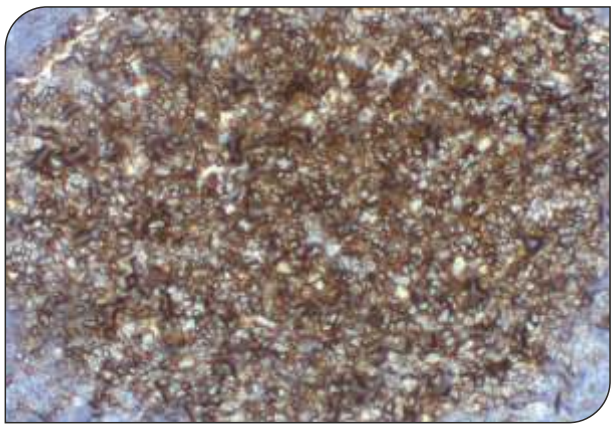
Thy-1 or CD90 (Cluster of Differentiation 90) is a 25-37 kDa heavily N-glycosylated, glycophosphatidylinositol (GPI) anchored conserved cell surface protein with a single V-like immunoglobulin domain originally discovered as a thymocyte antigen. CD90 is expressed on thymocytes, neurons, glial cells, endothelial cells, fibroblasts, fetal liver cells and haematopoietic stem cells in normal bone marrow and cord blood. Thy-1 has been used as a marker for a variety of stem cells and for the axonal processes of mature neurons. CD90 is associated with unfavorable clinical and biological features in acute myeloid leukemia. In prostate cancer, CD90 has been reported to be over expressed in cancer associated fibroblasts and serve as a marker for prostate cancer associated stroma.

E -EDTA BUFFER

TE -TRIS-EDTA BUFFER

C -CITRATE BUFFER

Rabbit Monoclonal Anti-Human
CD95-EP208



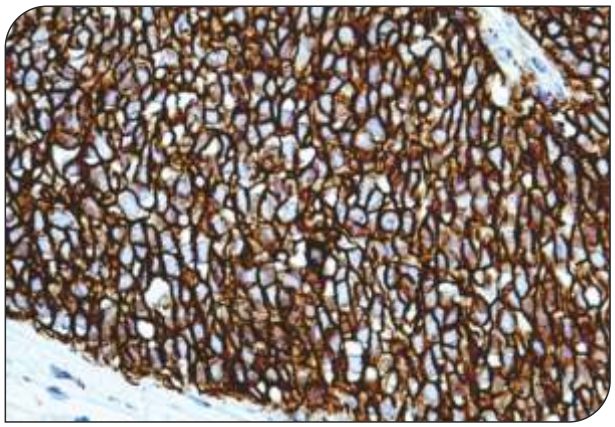
Tonsil stained with Anti-CD95

Clone	:	EP208
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm or Membrane
Control	:	Tonsil

Catalog#	Catalog#	Catalog#
PR269-3ml (RTU)	PR269-6ml (RTU)	—
HAR269-3ml (RTU)	HAR269-6ml (RTU)	—
CR269-0.1ml (Conc)	CR269-0.5ml (Conc)	CR269-1ml (Conc)

TE The CD95 (Fas) protein is a cell surface receptor belonging to the tumor necrosis factor (TNF) family that transduces death signaling on engagement by multimeric Fas ligand (CD95L), of which there are eight in its membrane bound form or in its soluble form resulting from cleavage by a putative metalloproteinase. CD95 is a widely expressed protein. CD95 mediated apoptosis is an essential mechanism for the maintenance of normal tissue homeostasis and disruption of its death pathway has been associated with a wide range of human diseases including autoimmune diseases, lymphoproliferative disorders and malignancies. The expression of CD95 serves as a prognostic marker in predicting the outcome of disease progression and treatment in many types of tumors.

Rabbit Monoclonal Anti-Human
CD99-EP8



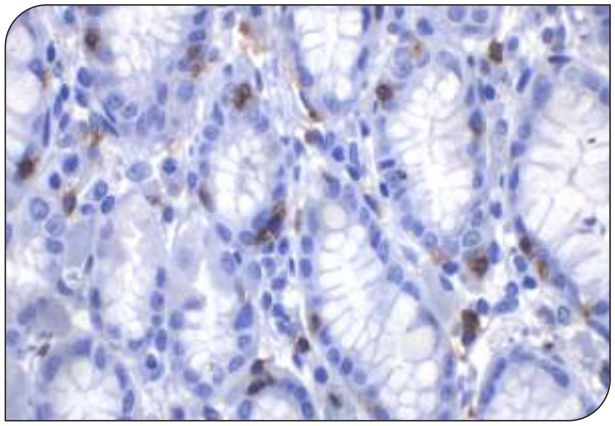
Ewing's sarcoma stained with Anti-CD99

Clone	:	EP8
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Membrane or Cytoplasm
Control	:	Ewing's Sarcoma, Tonsil

Catalog#	Catalog#	Catalog#
PR027-3ml (RTU)	PR027-6ml (RTU)	—
HAR027-3ml (RTU)	HAR027-6ml (RTU)	—
CR027-0.1ml (Conc)	CR027-0.5ml (Conc)	CR027-1ml (Conc)

TE CD99 is a transmembrane glycoprotein, also known as MIC2. It is involved in T-cell adhesion, leukocyte migration and differentiation of primitive neuroectodermal cell. CD99 labels lymphocyte, ovarian granulosa cells, pancreatic islet cells, sertoli cells, CNS ependymal cells and endothelial cells. CD99 has been useful in diagnosis of Ewing's sarcoma, sex cordstromal tumor, and endocrine tumor of pancreas. Additionally, it is found in a subset of other tumors including lymphoblastic lymphoma, breast carcinoma and other malignancies.

Rabbit Monoclonal Anti-Human
CD103-EP206



Stomach Ca stained with Anti-CD103

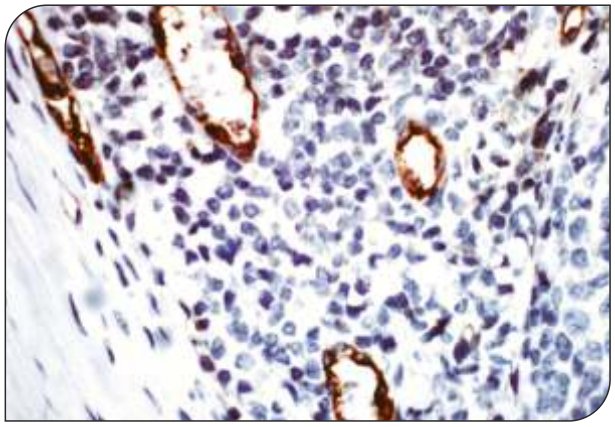
Clone	:	EP206
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Membrane
Control	:	Tonsil, Hodgkin's Lymphoma, Colon, Hairy Cell Leukemia, Stomach Ca

Catalog#	Catalog#	Catalog#
PR261-3ml (RTU)	PR261-6ml (RTU)	—
HAR261-3ml (RTU)	HAR261-6ml (RTU)	—
CR261-0.1ml (Conc)	CR261-0.5ml (Conc)	CR261-1ml (Conc)

TE

CD103, also known as integrin alpha E (ITGAE) is an integrin protein that in humans is encoded by ITGAE gene. It binds integrin beta 7 to form the complete heterodimeric molecular aEb7 that binds to an extracellular matrix component and cellular counter receptor. They mediate cell adhesion, migration and signaling and are important for T lymphocyte localization. CD103 is expressed on intraepithelial lymphocytes in mucosal areas, including lung and GI tract. In malignancies, CD103 is present on all enteropathy type T-cell lymphomas. Additionally, CD103 has been a useful maker for hairy cell leukemia.

Rabbit Monoclonal Anti-Human
CD105-EP274



Tonsil stained with Anti-CD105

Clone	:	EP274
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Tonsil, Vascular Tissue

Catalog#	Catalog#	Catalog#
PR188-3ml (RTU)	PR188-6ml (RTU)	—
HAR188-3ml (RTU)	HAR188-6ml (RTU)	—
CR188-0.1ml (Conc)	CR188-0.5ml (Conc)	CR188-1ml (Conc)

TE

CD105 (endoglin) is a disulfide linked homodimeric cell membrane glycoprotein. It was initially discovered in a human pre-B cell line. CD105 functions as a receptor for transforming growth factor (TGF) b1 and b3, and modulates TGF-b signaling through interactions with TGF-b receptors I and/or II. CD105 is a proliferation associated and hypoxiainducible protein abundantly expressed in angiogenic endothelial cells.

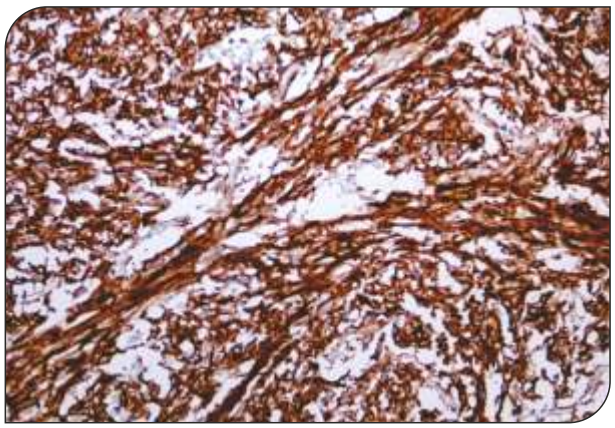
Tumor microvessel density assessed by CD105 immunohistochemical staining in paraffin embedded tissue sections correlates significantly with tumor aggressiveness and prognosis in many types solid tumors.

E - EDTA BUFFER

TE - TRIS-EDTA BUFFER

C - CITRATE BUFFER

Rabbit Monoclonal anti-Human
CD117/c-Kit-EP10



GIST stained with Anti-CD117/c-Kit

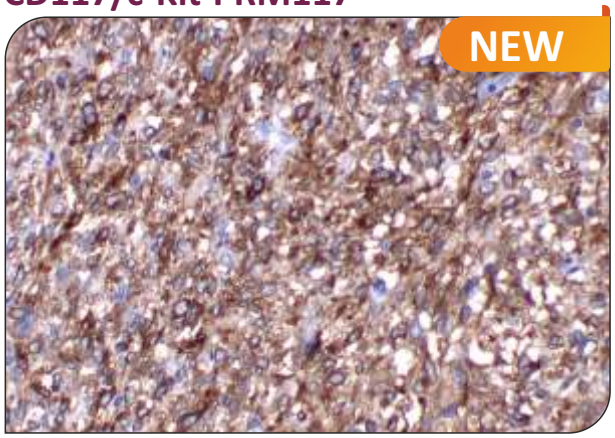
TE

Member of the Tyrosine Kinase Receptor (TKRs) and highly homologous to receptor PDF and CSF-1. Activation of c-Kit tyrosine kinase by SCF (Stem Cell factor) leads to autophosphorylation and association of c-Kit with substrate PI3K. c-Kit/CD117 is a marker for mast cell and gastrointestinal stromal tumor.

Clone	:	EP10
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Membrane and Cytoplasm
Control	:	Gastrointestinal Stromal Tumor(GIST)

Catalog#	Catalog#	Catalog#
PR033-3ml (RTU)	PR033-6ml (RTU)	—
HAR033-3ml (RTU)	HAR033-6ml (RTU)	—
CR033-0.1ml (Conc)	CR033-0.5ml (Conc)	CR033-1ml (Conc)

Rabbit Monoclonal Anti-Human
CD117/c-Kit-PRM117



GIST stained with Anti-CD117/c-Kit

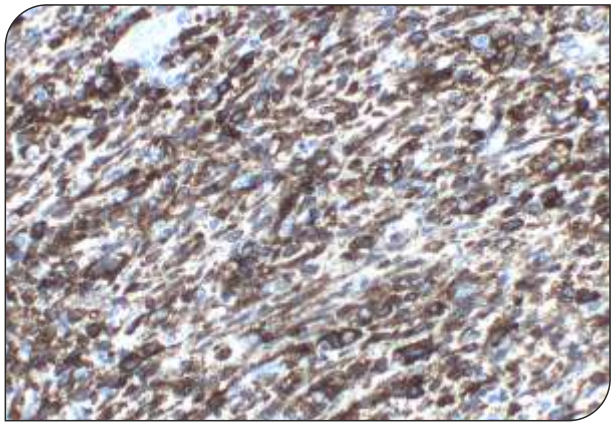
TE

This antibody reacts with human oncoprotein c-kit (CD117). The protooncogene c-kit encodes a transmembrane receptor with tyrosine kinase activity, c-kit (CD117), which is closely related to the family of platelet derived growth factor receptors. c-KIT is involved in hematopoiesis, gametogenesis and melanogenesis. This antigen is expressed in the normal breast epithelium, melanocytes, mast cells and glia. This antibody is recommended to identify oncoprotein expression c-kit in a variety of normal and neoplastic tissues, including gastrointestinal stromal tumors (GIST). It is also expressed in testicular seminoma, small cell carcinomas of the lung, breast carcinomas, glioblastomas, melanomas, and chronic

Clone	:	PRM117
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Membrane and Cytoplasm
Control	:	GIST, Seminoma

Catalog#	Catalog#	Catalog#
PR318-3ml (RTU)	PR318-6ml (RTU)	—
HAR318-3ml (RTU)	HAR318-6ml (RTU)	—
CR318-0.1ml (Conc)	CR318-0.5ml (Conc)	CR318-1ml (Conc)

Rabbit Polyclonal Anti-Human
CD117/c-Kit-Polyclonal



GIST stained with Anti-CD117/c-Kit

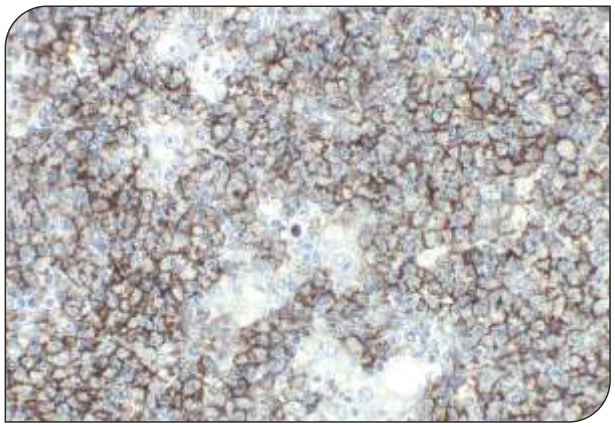
Clone	:	Polyclonal
Isotype	:	NA
Reactivity	:	Human, FFPE
Localization	:	Membrane and Cytoplasm
Control	:	GIST

Catalog#	Catalog#	Catalog#
PP088-3ml (RTU)	PP088-6ml (RTU)	—
HAP088-3ml (RTU)	HAP088-6ml (RTU)	—
CP088-0.1ml (Conc)	CP088-0.5ml (Conc)	CP088-1ml (Conc)

TE

CD117 (c-Kit) is expressed on hematopoietic stem/progenitor cells, Cajal cells, mammalian ductal epithelia, melanocytes, and basal cells of skin. The antibody is a useful tool for the identification of cancers expressing c-Kit, eg. small cell lung carcinoma (SLCL), mast cell diseases, Ewing sarcoma, and may aid in the differentiation between gastrointestinal stromal tumors (GISTs) and other intra abdominal mesenchymal tumors along with other markers, e.g. CD34 and S100.

Rabbit Monoclonal Anti-Human
CD138-EP201



Plasmacytoma stained with Anti-CD138

Clone	:	EP201
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Membrane and/or Cytoplasm
Control	:	Lymph Node, Tonsil, Plasmacytoma

Catalog#	Catalog#	Catalog#
PR018-3ml (RTU)	PR018-6ml (RTU)	—
HAR018-3ml (RTU)	HAR018-6ml (RTU)	—
CR018-0.1ml (Conc)	CR018-0.5ml (Conc)	CR018-1ml (Conc)

TE

CD138, also known as Syndecan-1, is a member of the transmembrane heparin sulfate proteoglycan family, acts as an extracellular matrix receptor and is involved in many cellular functions, including cell-cell adhesion and cell matrix adhesion. CD138 expression is found in both hematopoietic and non-hematopoietic cells. In the hematopoietic system, CD138 labels plasma cells. It is an excellent marker for plasmacytic differentiation within the spectrum of hematologic malignancy. Among non-hematolymphoid cells, CD138 reactivity is observed in many types of epithelial cells and stomal cells in both normal and tumor tissues.

Rabbit Monoclonal Anti-Human
CD138-SDCP

Plasmacytoma stained with Anti-CD138

Clone	:	SDCP
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Membrane
Control	:	Colon Adeno Ca, Tonsil, Colon, Liver, Appendix Plasmacytoma, Placenta

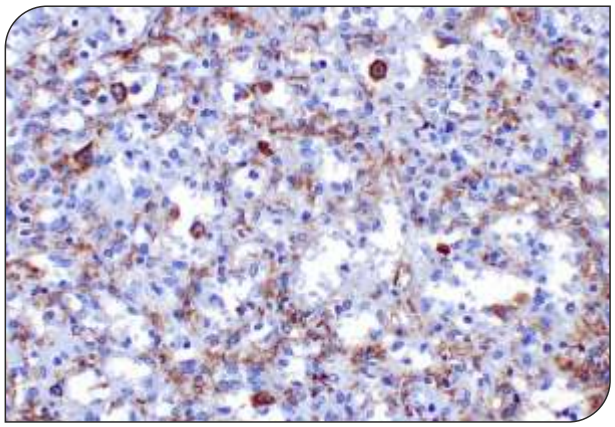
Catalog#	Catalog#	Catalog#
PR364-3ml (RTU)	PR364-6ml (RTU)	—
CR364-0.1ml (Conc)	CR364-0.5ml (Conc)	CR364-1ml (Conc)

TE

CD138, also designated syndecan-1, is a member of the syndecan family of four transmembrane spanning proteins capable of binding to heparan sulfate and chondroitin sulfate molecules. The syndecans' main functions are to control cell growth and differentiation as well as to maintain cell adhesion and cell migration. Under normal conditions CD138 is predominantly expressed on mature plasma cells and early preB-cells, while other haematolymphoid cells are negative. Various types of epithelial cells are also CD138 positive. Squamous epithelial cells show strong membranous and some cytoplasmic staining, except for the mature superficial squamous epithelial cells which are unstained. Mature mesenchymal and neural tissues are not stained. Among haematolymphoid neoplasms, CD138 is expressed in practically all cases of plasma cell malignancies.

Among nonhaematolymphoid neoplasms the expression of CD138 is found in various types of carcinoma. In the following, the large majority of cases is CD138 positive: skin squamous cell carcinoma and basal cell carcinoma, colorectal adenocarcinoma, cholangiocarcinoma, transitional cell carcinoma, endometrial adenocarcinoma, ductal and lobular breast carcinoma, hepatocellular carcinoma, renal cell carcinoma, and lung adenocarcinoma.CD138 is a very sensitive and specific marker for identification of plasma cells and plasma cell differentiation within haematolymphoid tissues in benign and neoplastic conditions.

Rabbit Monoclonal Anti-Human
CD163-EP324



Spleen stained with Anti-CD163

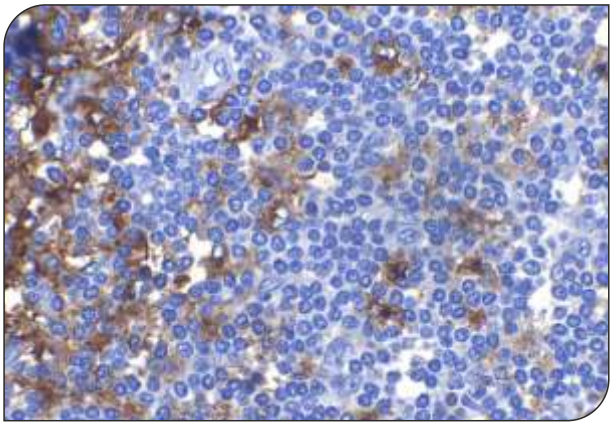
Clone	:	EP324
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm or Membrane
Control	:	Spleen, Lymph node

Catalog#	Catalog#	Catalog#
PR228-3ml (RTU)	PR228-6ml (RTU)	—
HAR228-3ml (RTU)	HAR228-6ml (RTU)	—
CR228-0.1ml (Conc)	CR228-0.5ml (Conc)	CR228-1ml (Conc)

C TE

CD163 is an acute phase-regulated receptor involved in the clearance and endocytosis of hemoglobin/ haptoglobin complexes by macrophages, thereby protecting tissues from free hemoglobin mediated oxidative damage. Expression of CD163 is restricted to cells of the monocyte/macrophage lineage. This antibody labels monocytes and macrophages in the spleen and peripheral blood. The CD163 antibody might be used for identifying tumors of monocytic origin.

Rabbit Monoclonal Anti-Human
CD205-EP176



Lymph Node stained with Anti-CD205

Clone	:	EP176
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Membrane or Cytoplasm
Control	:	Lymph Node, Tonsil, Thymus

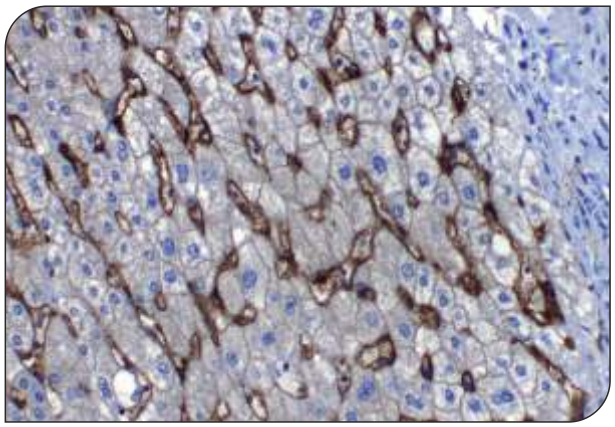
Catalog#	Catalog#	Catalog#
PR284-3ml (RTU)	PR284-6ml (RTU)	—
HAR284-3ml (RTU)	HAR284-6ml (RTU)	—
CR284-0.1ml (Conc)	CR284-0.5ml (Conc)	CR284-1ml (Conc)

TE

CD205, also named DEC 205, belongs to the macrophage mannose receptor family of C-type lectin endocytic receptors. It is a novel endocytic receptor that can be used by dendritic cells and thymic epithelial cells to direct captured antigens from the extracellular space to a specialized antigen processing compartment. CD205 is predominantly expressed by the thymic cortical epithelium and by dendritic cells (DC), but can also be detected at low levels in T and B lymphocytes and several other epithelial cell types. CD205 is a novel thymic epithelial marker that is important for the positive selection process of thymocytes.

In a study reported by Nonaka et al. on 77 cases of thymic epithelial neoplasms, comprised of 58 cases of thymoms and 17 cases of thymic carcinomas, CD205 has been detected in 100% of type B thymomas, a majority (89%) of type A thymomas and 59% thymic carcinomas by immunohistochemistry. It is a sensitive and specific marker for tymoma, while the sensitivity to thymic carcinoma is lower than CD5 and CD117.

Mouse Monoclonal Anti-Human
CD209/DC-SIGN-C209/1781



Liver stained with Anti-CD209/DC-SIGN

Clone	:	C209/1781
Isotype	:	Mouse IgG2b
Reactivity	:	Human, FFPE
Localization	:	Membrane and Cytoplasm
Control	:	Liver, Uterus, Lymph Node, Small Intestine

Catalog#	Catalog#	Catalog#
PM267-3ml (RTU)	PM267-6ml (RTU)	—
HAM267-3ml (RTU)	HAM267-6ml (RTU)	—
CM267-0.1ml (Conc)	CM267-0.5ml (Conc)	CM267-1ml (Conc)

TE

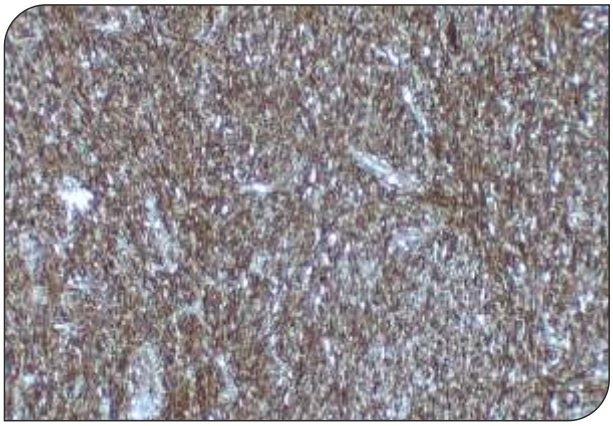
DC-SIGN is a transmembrane receptor that is expressed on the surface of dendritic cells and macrophages. It is involved in the innate immune system and recognizes numerous evolutionarily divergent pathogens ranging from parasites to viruses. The protein is organized into three distinct domains: an N-terminal transmembrane domain, a tandem repeat neck domain and C-type lectin carbohydrate recognition domain. The extracellular region consisting of the C-type lectin and neck domains has a dual function as a pathogen recognition receptor and a cell adhesion receptor by binding carbohydrate ligands on the surface of microbes and endogenous cells. The neck region is important for homo-oligomerization, which allows the receptor to bind multivalent ligands with high avidity.

E -EDTA BUFFER

TE -TRIS-EDTA BUFFER

C -CITRATE BUFFER

Rabbit Monoclonal Anti-Human
CD248(Endosialin)-EP383



Fibrous Histiocytoma stained with Anti-CD248(Endosialin)

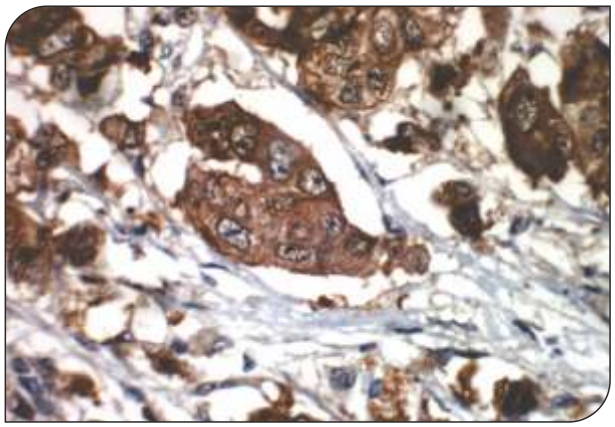
Clone	:	EP383
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm and Membrane
Control	:	Placenta, Fibrous Histiocytoma, Breast Ca

Catalog#	Catalog#	Catalog#
PR279-3ml (RTU)	PR279-6ml (RTU)	—
HAR279-3ml (RTU)	HAR279-6ml (RTU)	—
CR279-0.1ml (Conc)	CR279-0.5ml (Conc)	CR279-1ml (Conc)

TE

CD248, known also as endosialin and tumor endothelial marker 1 (TEM1), is a 95-kDa transmembrane glycoprotein expressed in activated stromal and perivascular fibroblasts and pericytes. CD248 is an important regulator of critical pathways involved with stromal fibroblast migration, and proliferation. During normal embryonic development, CD248 is highly expressed across diverse tissue types. Postnatally, its expression is restricted to the endometrium, bone marrow and corpus luteum. Conversely, the cytoplasmic domain was shown to regulate stromal fibroblast function. CD248 is expressed within the endothelium across many tumors types include sarcomas,carcinoma and neuroectodermal tumors. Within the tumor stroma, activated fibroblasts sub populations are often associated with poor prognosis.

Rabbit Monoclonal Anti-Human
CDK4-EP180



Breast Ca stained with Anti-CDK4

Clone	:	EP180
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus or Cytoplasm
Control	:	Breast Ca, Colon

Catalog#	Catalog#	Catalog#
PR232-3ml (RTU)	PR232-6ml (RTU)	—
CR232-0.1ml (Conc)	CR232-0.5ml (Conc)	CR232-1ml (Conc)

TE

Cyclin dependent kinase 4 (CDK4) is a member of the Ser/Thr protein kinase family. It is a catalytic subunit of the protein kinase complex that is important for cell cycle G1 phase progression. The activity of this kinase is restricted to the G1-S phase, which is controlled by the regulatory subunits D-type cyclins and CDK inhibitor p16 (INK4a). Overexpression of CDK4 has been observed in many tumor types, including oral squamous cell carcinoma and cancers of the pancreatic (endocrine tumors), lung, breast and colon. The expression of CDK4 is associated with tumor progression. Binh et al. reported a high expression of CDK4 (92%) in atypical lipomatous tumor/well differentiated liposarcomas (ALT-WDLPS) and de-differentiated liposarcomas (DDLPS) by immunostaining. CDK4 is useful in differentiating ALT-WDLPS from benign adipose tumors and to separate DDLPS from poorly differentiated sarcomas.

Rabbit Monoclonal Anti-Human
CDX2-EP25

Colon stained with Anti-CDX-2

Clone	:	EP25
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Colon Adeno Ca, Colon

Catalog#	Catalog#	Catalog#
PR028-3ml (RTU)	PR028-6ml (RTU)	—
HAR028-3ml (RTU)	HAR028-6ml (RTU)	—
CR028-0.1ml (Conc)	CR028-0.5ml (Conc)	CR028-1ml (Conc)

TE

The caudal related homeodomain protein 2, CDX2, is a transcription factor which is expressed in the intestine and is thought to play an important role in the proliferation and differentiation of intestinal epithelial cells. The CDX2 protein is expressed in primary and metastatic colorectal carcinomas, intestinal metaplasia of the stomach and intestinal type gastric cancer. In human colorectal cancer, the expression of both CDX2 and carbonic anhydrase 1, a gene regulated by CDX2, is reduced or absent. CDX2 is one of the important regulators in defining pathways for coordinate control of drug metabolism in the gastrointestinal tract.

Rabbit Monoclonal Anti-Human
CDX2-TSGP

Colon stained with Anti-CDX2

Clone	:	TSGP
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Colon, Colon Ca

Catalog#	Catalog#	Catalog#
PR341-3ml (RTU)	PR341-6ml (RTU)	—
HAR341-3ml (RTU)	HAR341-6ml (RTU)	—
CR341-0.1ml (Conc)	CR341-0.5ml (Conc)	CR341-1ml (Conc)

TE

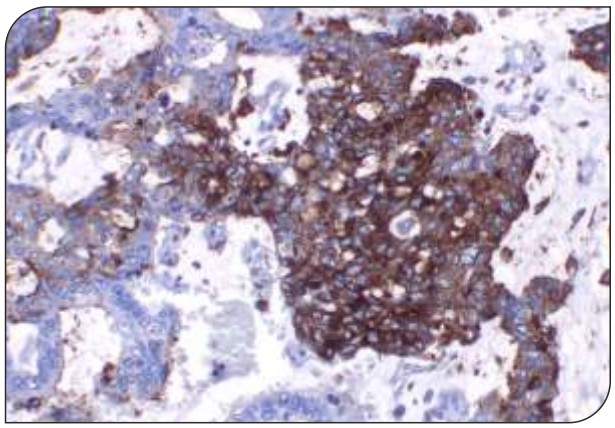
CDX2 is a homeobox gene encoding nuclear homeodomain transcriptional factor essential to intestinal organogenesis. CDX2 is crucial for differentiation of epithelium in the intestine, pancreas and biliary tract. CDX2 interacts with the tumour suppressor genes APC and E-cadherin, as well as bcl-2.In the intestine (from duodenum to rectum) CDX2 nuclear protein is demonstrated strongly and uniformly in all types of epithelial cells. In pancreas and biliary tract CDX2 protein is demonstrated in scattered ductal cells. In tumor tissues, CDX2 is positive in the large majority cases of colorectal and appendiceal adenocarcinomas.CDX2 is a relatively sensitive and specific marker for “intestinal” adenocarcinomas. In the classification of (adeno-)carcinomas of the unknown primary, CDX2 is an important marker but should always be included in a panel. Also in order to identify the origin of neuroendocrine tumors, CDX2 is useful in a panel.

E - EDTA BUFFER

TE - TRIS-EDTA BUFFER

C - CITRATE BUFFER

Rabbit Monoclonal Anti-Human
CEA-EP216



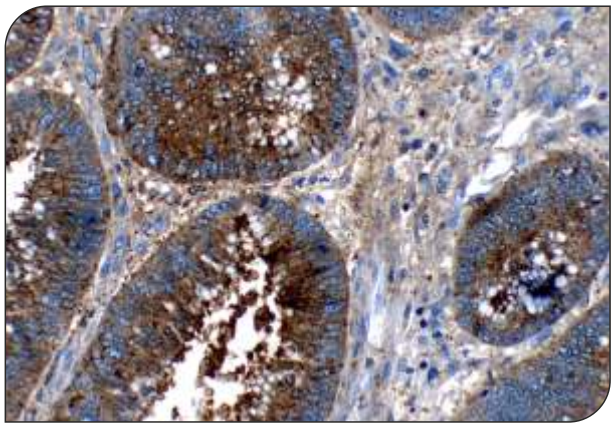
Gastric Adeno Ca stained with Anti-CEA

Clone	:	EP216
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Membrane or Cytoplasm
Control	:	Colon Ca, Gastric Adeno Ca

Catalog#	Catalog#	Catalog#
PR029-3ml (RTU)	PR029-6ml (RTU)	—
HAR029-3ml (RTU)	HAR029-6ml (RTU)	—
CR029-0.1ml (Conc)	CR029-0.5ml (Conc)	CR029-1ml (Conc)

C Carcinoembryonic Antigen (CEA), also known as CD66e, is a cell surface glycoprotein that exhibits several functions, including regulation of intercellular adhesion, differentiation and anoikis, cell polarization and tissue architecture. CEA is present in fetal colon and many types of epithelial tumors, including denocarcinomas of the GI tract, lung and breast. Antibody to CEA is useful in differentiating lung adenocarcinoma (positive) from mesothelioma (negative). CEA has been helpful in monitoring tumor progression.

Mouse Monoclonal Anti-Human
CEA-COL-1



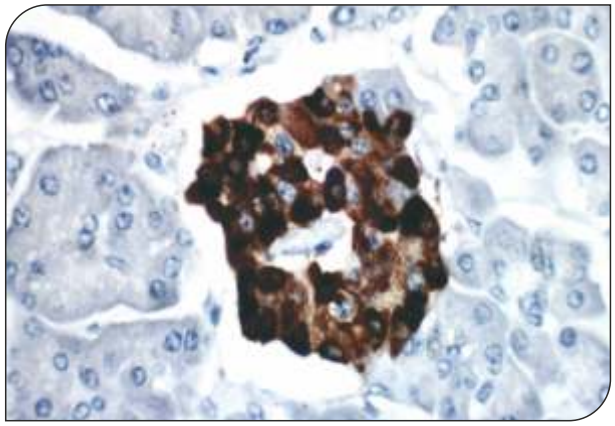
Colon Ca stained with Anti-CEA

Clone	:	COL-1
Isotype	:	Mouse IgG2a
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm and Membrane
Control	:	Gastric Ca, Colon Ca, Colon

Catalog#	Catalog#	Catalog#
PM086-3ml (RTU)	PM086-6ml (RTU)	—
HAM086-3ml (RTU)	HAM086-6ml (RTU)	—
CM086-0.1ml (Conc)	CM086-0.5ml (Conc)	CM086-1ml (Conc)

C Carcinoembryonic Antigen (CEA) is found in several adenocarcinomas, such as colon, lung, breast, stomach and pancreas. Malignant mesothelioma is usually negative for CEA. The antibody is a useful tool for the identification of colon carcinomas, and for the distinction of mesothelioma from adenocarcinoma when used with a panel of antibodies (eg. with Cytokeratin, Calretinin, etc.)

Rabbit Monoclonal Anti-Human
Chromogranin A-EP38



Pancreas stained with Anti-Chromogranin A

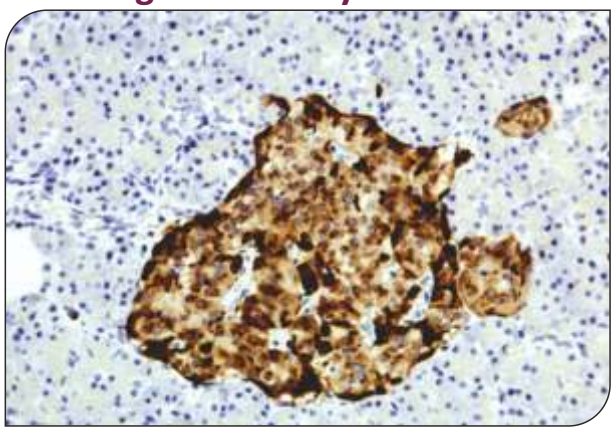
Clone	:	EP38
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Pancreas, Neuroendocrine Tumor

Catalog#	Catalog#	Catalog#
PR030-3ml (RTU)	PR030-6ml (RTU)	—
HAR030-3ml (RTU)	HAR030-6ml (RTU)	—
CR030-0.1ml (Conc)	CR030-0.5ml (Conc)	CR030-1ml (Conc)

C

Chromogranin A (CgA) is an 86 kDa protein that is the major member of the granin family of acidic secretory glycoproteins located in neurosecretory granules of neuroendocrine cells. Chromogranin A showed broad expression in endocrine tissues including pituitary, adrenal medulla, thyroid, pancreatic islets, and gastrointestinal tract. Chromogranin A represents the single most specific marker of neuroendocrine differentiation in general use. It is useful for identification of neuroendocrine tumors.

Rabbit Polyclonal Anti-Human
Chromogranin A-Polyclonal



Pancreas stained with Anti-Chromogranin A

Clone	:	Polyclonal
Isotype	:	NA
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Neuroendocrine Tumor, Pancreas

Catalog#	Catalog#	Catalog#
PP087-3ml (RTU)	PP087-6ml (RTU)	—
HAP087-3ml (RTU)	HAP087-6ml (RTU)	—
CP087-0.1ml (Conc)	CP087-0.5ml (Conc)	CP087-1ml (Conc)

C

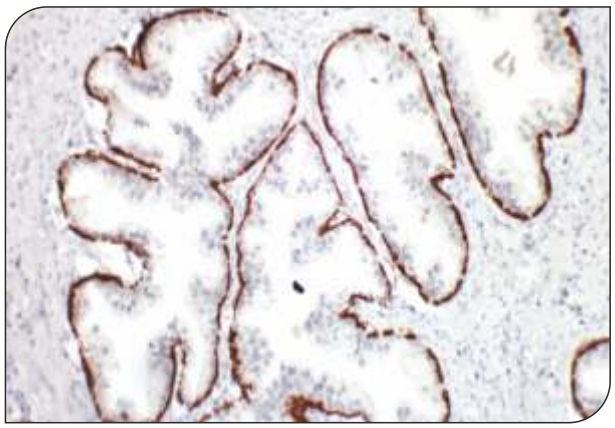
Chromogranin A present in secretory granules of endocrine cells. It is the most specific marker for neuroendocrine differentiation and corresponds to the neurosecretory granule. The antibody labels Chromogranin A and is used to qualitatively distinguish between neoplasm of neuroendocrine origin from non-neuroendocrine origin.

E - EDTA BUFFER

TE - TRIS-EDTA BUFFER

C - CITRATE BUFFER

Rabbit Monoclonal Anti-Human
CK5 & CK14 Cocktail-EP24 & EP61



BPH stained with Anti-CK5 & CK14 Cocktail

Clone	:	EP24 & EP61
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Benign Prostate Hyperplasia (BPH)

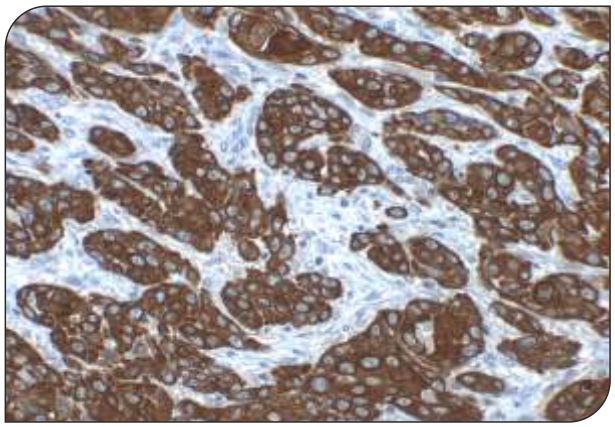
Catalog#	Catalog#	Catalog#
PR031-3ml (RTU)	PR031-6ml (RTU)	—
HAR031-3ml (RTU)	HAR031-6ml (RTU)	—
CR031-0.1ml (Conc)	CR031-0.5ml (Conc)	CR031-1ml (Conc)

C

Cytokeratin 5 (CK5) is a type II cytokeratin. Antibody to CK5 labels myoepithelial cells of breast and prostate basal cells. CK5 has been useful in different studies as immunohistochemical markers suggesting mesothelioma, and their expression is analyzed for the histological differentiation of adenocarcinomas, especially when facing metastatic tumors of unknown origin. Cytokeratin 14 (CK14) is a 50 kDa keratin expressed in abundance in stratified epithelial, epidermal, basal, mesothelial, and myoepithelial cells in various tissues including breast and prostate. The CK14 antibody is helpful in the identification of breast cancer with a basal phenotype. It has been reported that Cytokeratin 5/14 positive breast cancers are true basal phenotype confined to BRCA1 tumors.

Rabbit Monoclonal Anti-Human
CK5 & CK6 Cocktail-EP24 & EP67

E · TE



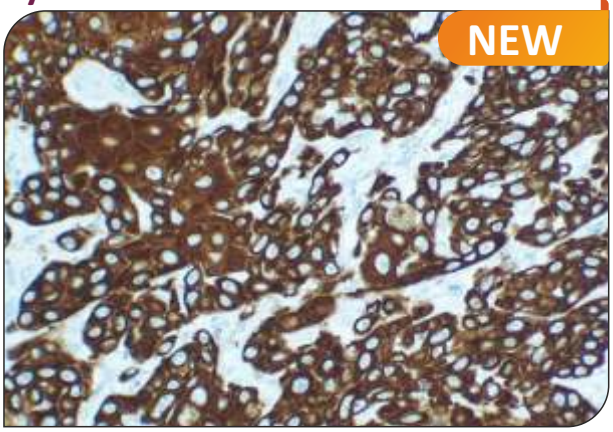
SCC stained with Anti-CK5 & CK6 Cocktail

Clone	:	EP24 & EP67
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Squamous Cell Ca, Prostate, Mesothelioma

Catalog#	Catalog#	Catalog#
PR106-3ml (RTU)	PR106-6ml (RTU)	—
HAR106-3ml (RTU)	HAR106-6ml (RTU)	—
CR106-0.1ml (Conc)	CR106-0.5ml (Conc)	CR106-1ml (Conc)

Keratins are cytoplasmic intermediate filament proteins expressed by epithelial cells. Cytokeratin 5 (CK5) is a type II cytokeratin. CK5 labels myoepithelial cells of breast and prostate basal cells. CK5 and calretinin have been useful in different studies as immunohistochemical markers suggestive of mesothelioma, and their expression is analyzed for the histological differentiation with adenocarcinomas, especially when confronting metastatic tumors of unknown origin. The human type II Cytokeratin 6 (CK6; 56 kDa) is expressed on stratified epithelia including oral mucosa, esophagus, basal layer of epidermis, the outer root sheath of hair follicles and in glandular epithelia. Anti-CK6 paired with the CK5 antibody is useful for differentiating mesothelioma (positive) from lung carcinoma (negative) in the pleura.

Rabbit Monoclonal Anti-Human
Cytokeratin 5&6-EBS1P



SCC stained with Anti-Cytokeratin 5&6

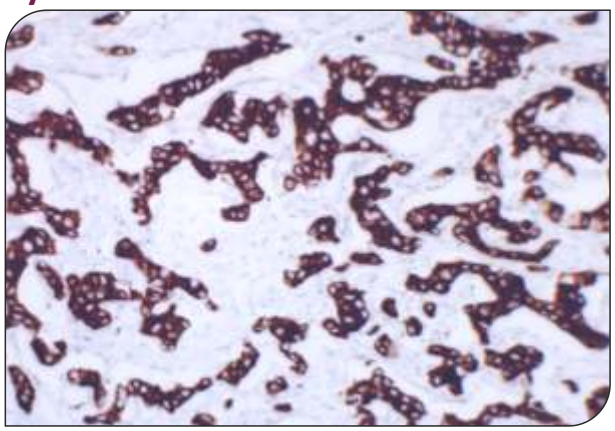
Clone	:	EBS1P
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	SCC

Catalog#	Catalog#	Catalog#
PR366-3ml (RTU)	PR366-6ml (RTU)	—
HAR366-3ml (RTU)	HAR366-6ml (RTU)	—
CR366-0.1ml (Conc)	CR366-0.5ml (Conc)	CR366-1ml (Conc)

TE

Cytokeratin5 is a basic protein that is closely related to cytokeratin 6. They share similar tissue distribution and are found in various proportions in many non-keratinizing stratified squamous epithelia eg. tongue mucosa, as well as in basal epithelia of trachea, basal cells of epidermis, hair follicles, sebaceous and sweat glands of skin, luminal cells of the mammary gland, basal cells of prostate, urothelium, vagina and endocervical mucosa. Cytokeratins 5 and 6 are also expressed in basal cell epitheliomas, squamous cell carcinomas of skin, tongue, epiglottis and of the rectalanal region. Cytokeratin 5&6 is a useful aid for classification of epithelioid mesotheliomas.

Rabbit Monoclonal Anti-Human
Cytokeratin 7-EP16



Lung Ca stained with Anti-Cytokeratin 7

Clone	:	EP16
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Lung Adeno Ca, Salivary gland

Catalog#	Catalog#	Catalog#
PR037-3ml (RTU)	PR037-6ml (RTU)	—
HAR037-3ml (RTU)	HAR037-6ml (RTU)	—
CR037-0.1ml (Conc)	CR037-0.5ml (Conc)	CR037-1ml (Conc)

C

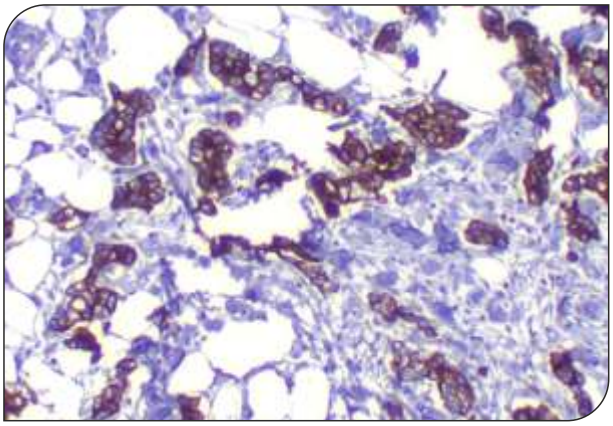
Cytokeratin7 (CK7) is a cytoplasmic intermediate filament protein expressed on most ductal and glandular epithelium including lung, breast, bladder and female genital tract, but not in most gastrointerstinal epithelium, prostate, hepatocyte and squamous epithelium. CK7 expression is absent in colon cancer, prostate cancer and squamous carcinomas. The restricted expression of CK7 in some epithelium makes it useful to identify the organ origin of adenocarcinomas when combined with staining of Cytokeratin 20 and other cell specific markers.

E - EDTA BUFFER

TE - TRIS-EDTA BUFFER

C - CITRATE BUFFER

Mouse Monoclonal Anti-Human
Cytokeratin 7-OV-TL12/30



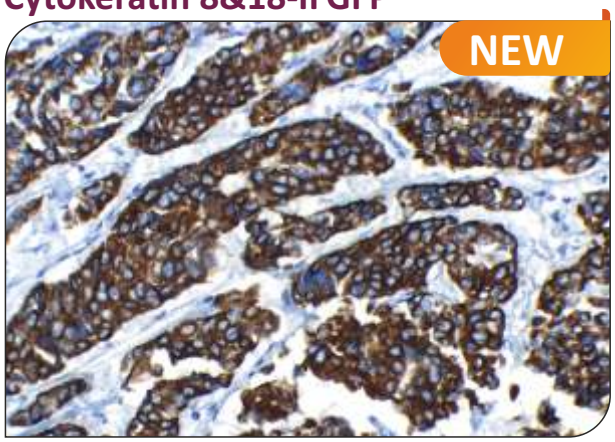
Breast Ca stained with Anti-Cytokeratin 7

Clone	:	OV-TL12/30
Isotype	:	Mouse IgG1
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Breast Ca, Lung Adeno Ca

Catalog#	Catalog#	Catalog#
PM091-3ml (RTU)	PM091-6ml (RTU)	—
HAM091-3ml (RTU)	HAM091-6ml (RTU)	—
CM091-0.1ml (Conc)	CM091-0.5ml (Conc)	CM091-1ml (Conc)

C. This antibody labels glandular and transitional epithelial cells. It is a useful marker for the identification of adenocarcinomas of the lung, breast, endometrium, thyroid gland, ovary, and transitional cell (urothelial) carcinoma.

Rabbit Monoclonal Anti-Human
Cytokeratin 8&18-IFGFP



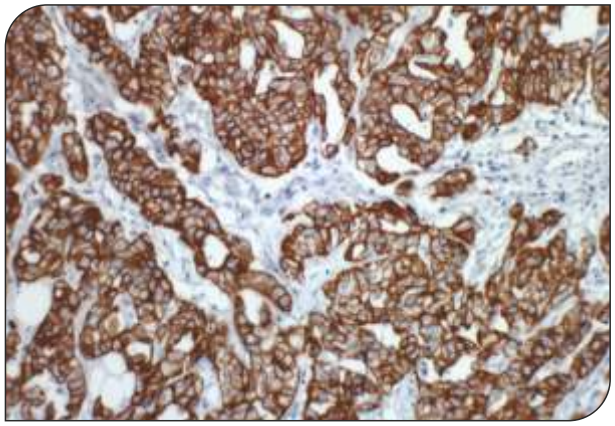
Breast Ca stained with Anti-Cytokeratin 8&18

Clone	:	IFGFP
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Liver, Colon Adeno Ca, Breast Ca

Catalog#	Catalog#	Catalog#
PR346-3ml (RTU)	PR346-6ml (RTU)	—
HAR346-3ml (RTU)	HAR346-6ml (RTU)	—
CR346-0.1ml (Conc)	CR346-0.5ml (Conc)	CR346-1ml (Conc)

TE. Cytokeratin 18 (also named keratin 18) is a type I cytokeratin. It is, together with its filament partner keratin 8, perhaps the most commonly found products of the intermediate filament gene family.In some epithelial cell types, keratin 8 and keratin 18 are the sole keratins present. The classical example is the liver, with keratin 8/keratin 18 representing the characteristic and only keratin pair of normal hepatocytes. The same is true for other highly specialized parenchymatous epithelia such as acinar cells of the pancreas, proximal tubular epithelial cells of the kidney, and certain endocrine cells such as pancreatic islet cells. Furthermore, keratin 8/keratin 18 occur together with other keratins-in various pseudostratified (e.g. respiratory) and complex (e.g. glandular) epithelia and in the urothelium; in these composite epithelial tissues, keratin 8 and keratin18 are often most prominent in the lumen-lining cells. Even in non-keratinizing stratified squamous epithelia, keratin 8 and keratin 18 may be focally expressed in the basal cell layer, together with keratin 19 and the constitutive stratified-epithelial keratins. regard to malignant tumors, keratin 8 and keratin 18 are expressed in most carcinomas except for some differentiated squamous cell carcinomas. Therefore, keratin 8 and keratin 18 antibody strongly stain most adenocarcinomas, hepatocellular carcinomas, renal cell carcinomas, and neuroendocrine carcinomas.

Rabbit Monoclonal Anti-Human
CK8 & CK18 Cocktail-EP17 & EP30



Breast Ca stained with Anti-CK8 & CK18 Cocktail

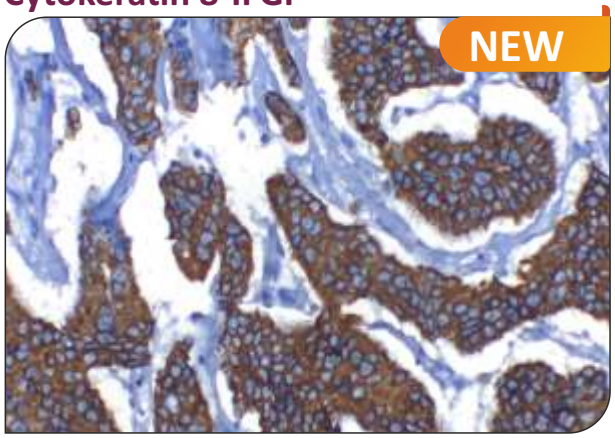
Clone	:	EP17 & EP30
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Colon Ca, Breast Ca

Catalog#	Catalog#	Catalog#
PR032-3ml (RTU)	PR032-6ml (RTU)	—
HAR032-3ml (RTU)	HAR032-6ml (RTU)	—
CR032-0.1ml (Conc)	CR032-0.5ml (Conc)	CR032-1ml (Conc)

E

Cytokeratin 8 (CK8) is an intermediate filament protein produced early in embryogenesis. It is the only type-II CK occurring in many simple epithelial cells in respiratory, gastrointestinal, male and female reproductive tracts, and thyroid. CK8 is often co-expressed with Cytokeratin 18 (CK18). CK8/18 is the major keratin pair in simple type epithelia, as found in the liver, pancreas, and intestine. The CK8 antibody is used to detect adenocarcinomas of simple epithelium origin. The difference in staining pattern is useful to distinguish ductal (peripheral staining) from lobular (perinuclear staining) breast carcinoma. Cytokeratin 18 is an intermediate filament phosphogly-coprotein that is expressed in simple and glandular and transitional epithelial cells, but not in stratified epithelial cells.

Rabbit Monoclonal Anti-Human
Cytokeratin 8-IFGP



Breast Ca stained with Anti-Cytokeratin 8

Clone	:	IFGP
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Lung Adeno Ca, Mammary Glands, Breast Ca

Catalog#	Catalog#	Catalog#
PR345-3ml (RTU)	PR345-6ml (RTU)	—
HAR345-3ml (RTU)	HAR345-6ml (RTU)	—
CR345-0.1ml (Conc)	CR345-0.5ml (Conc)	CR345-1ml (Conc)

TE

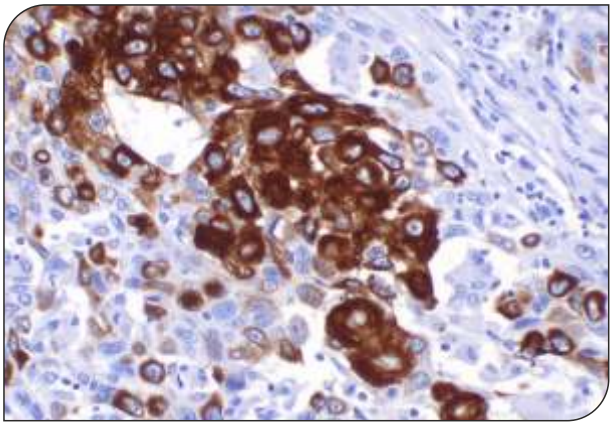
Cytokeratin 8 (CK8) is a member of the type II intermediate filament (IF) gene family, the majority of the cellular CK8 is assembled with its partner, CK18, into highly insoluble 10 nm filaments that extend from the nucleus to the internal leaflet of the plasma membrane.CK8 is always expressed by simple epithelial cells and by some carcinoma cells. In non-cancerous tissue, CK8 commonly expressed in normal glandular epithelia, transitional cell epithelium, and hepatocyte. In cancerous tissue, CK8 high expressed in adenocarcinoma, such as human breast or colorectal carcinoma.

E -EDTA BUFFER

TE -TRIS-EDTA BUFFER

C -CITRATE BUFFER

Rabbit Monoclonal Anti-Human
Cytokeratin 10-EP97



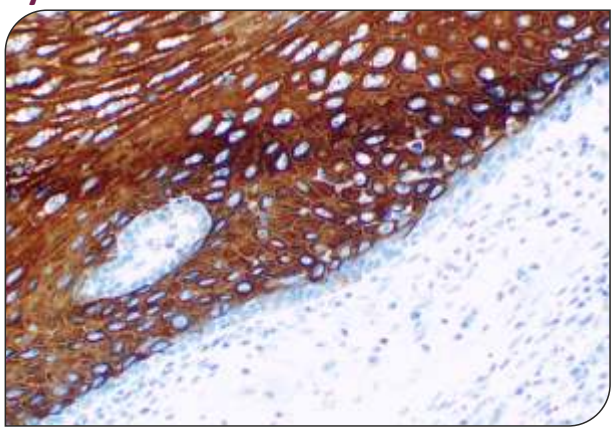
SCC stained with Anti-Cytokeratin 10

TE Cytokeratin 10 (CK10) is an intermediate filament protein and typically associated with cytokeratin 1 (CK1). CK10 is expressed in the suprabasal cell layers of certain stratified epithelia, notably epidermis. CK10 has been used as a marker of epidermal differentiation. Antibody against CK10 is helpful in the identification of more differentiated squamous cell carcinomas.

Clone	:	EP97
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Squamous Cell Ca (SCC), Skin

Catalog#	Catalog#	Catalog#
PR186-3ml (RTU)	PR186-6ml (RTU)	—
HAR186-3ml (RTU)	HAR186-6ml (RTU)	—
CR186-0.1ml (Conc)	CR186-0.5ml (Conc)	CR186-1ml (Conc)

Rabbit Monoclonal Anti-Human
Cytokeratin 13-EP69



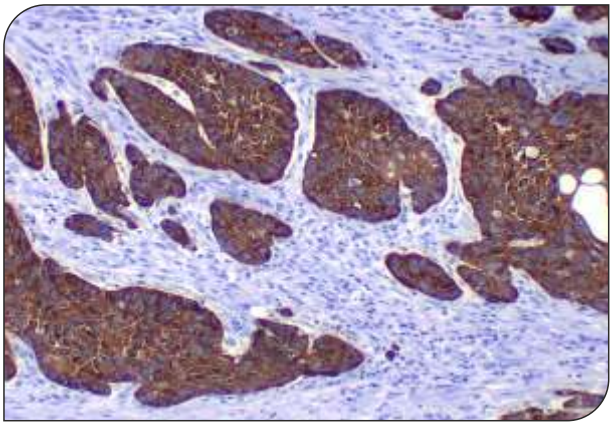
Esophagus stained with Anti-Cytokeratin 13

TE Keratins are a family of highly homologous proteins expressed as pairs of acidic and basic forms which make intermediate filaments in epithelial cells. Cytokeratin 13 (CK13) is the major acidic keratin, which together with CK4, its basic partner, is expressed in the suprabasal layers of non-cornified stratified epithelia including tongue mucosa, esophagus, anal canal epithelium, tracheal epithelium, uterine cervix, and urothelium. CK13 has been used as a marker for non-keratinized squamous epithelium. It is also expressed in various squamous metaplasia, but it is down regulated in squamous dysplasia and squamous carcinoma.

Clone	:	EP69
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Tonsil, Esophagus

Catalog#	Catalog#	Catalog#
PR187-3ml (RTU)	PR187-6ml (RTU)	—
HAR187-3ml (RTU)	HAR187-6ml (RTU)	—
CR187-0.1ml (Conc)	CR187-0.5ml (Conc)	CR187 -1ml (Conc)

Mouse Monoclonal Anti-Human
Cytokeratin 14-LL002



SCC stained with Anti-Cytokeratin 14

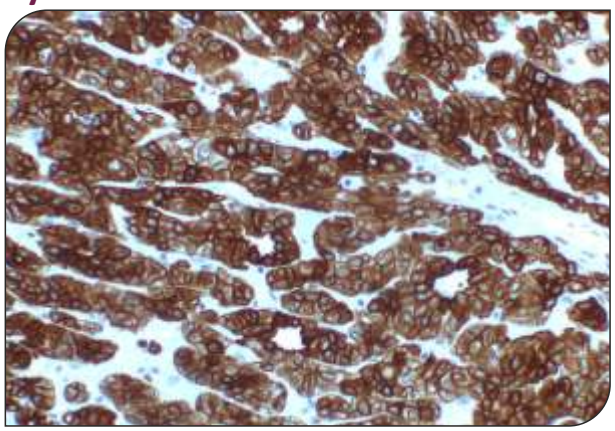
Clone	:	LL002
Isotype	:	Mouse IgG3/k
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Tonsil, Squamous Cell Ca, Skin

Catalog#	Catalog#	Catalog#
PM118-3ml (RTU)	PM118-6ml (RTU)	—
HAM118-3ml (RTU)	HAM118-6ml (RTU)	—
CM118-0.1ml (Conc)	CM118-0.5ml (Conc)	CM118-1ml (Conc)

TE

Keratin 14 belongs to the type A (acidic) subfamily of high molecular weight keratins and exists in combination with keratin 5. Keratin 14 has been studied as a prognostic marker in breast cancer (stains basal cells).

Rabbit Monoclonal Anti-Human
Cytokeratin 18-EP30



HCC stained with Anti-Cytokeratin 18

Clone	:	EP30
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	HCC, Breast, Breast Ca

Catalog#	Catalog#	Catalog#
PR298-3ml (RTU)	PR298-6ml (RTU)	—
HAR298-3ml (RTU)	HAR298-6ml (RTU)	—
CR298-0.1ml (Conc)	CR298-0.5ml (Conc)	CR298-1ml (Conc)

TE

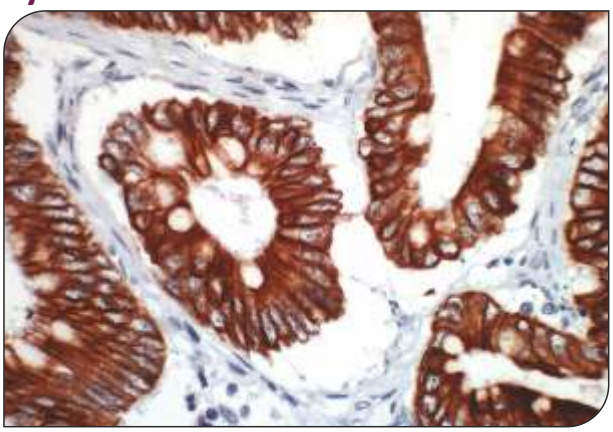
Cytokeratin 18 (CK18) is intermediate filament phosphoglycoprotein that is expressed in simple and glandular and transitional epithelial cells but not in stratified epithelial cells. CK18 is often co-expressed with CK8. CK8/18 is the major keratin pair in simple type epithelia. Adenocarcinomas originated from simple and glandular epithelium showed CK18 positive staining. In squamous carcinoma, poorly differentiated tumor cells show CK18 reactivity. Loss of CK18 expression is associated with progression of breast carcinoma.

E -EDTA BUFFER

TE -TRIS-EDTA BUFFER

C -CITRATE BUFFER

Rabbit Monoclonal Anti-Human
Cytokeratin 19-EP72



Colon stained with Anti-Cytokeratin 19

Clone	:	EP72
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Colon, Colon Ca

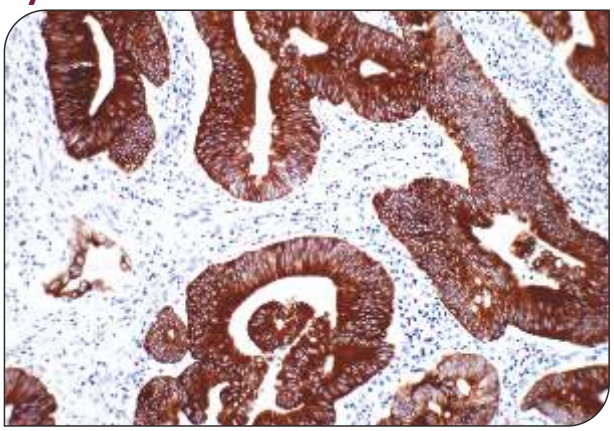
Catalog#	Catalog#	Catalog#
PR138-3ml (RTU)	PR138-6ml (RTU)	—
HAR138-3ml (RTU)	HAR138-6ml (RTU)	—
CR138-0.1ml (Conc)	CR138-0.5ml (Conc)	CR138-1ml (Conc)

TE

Cytokeratin polypeptide 19 (CK19) is a type I intermediate filament protein that is expressed in stratified and simple type epithelia. CK19 is synthesized mainly in embryonic and adult simple epithelia, but has also been found in non-keratinizing stratified epithelia as well. CK19 is the smallest known keratin and is remarkable in that, contrary to all other keratins, it does not have a designated partner for the formation of filaments, implying that regulation of its expression is different from other keratin encoding genes. CK19 antibody is a useful tool for the identification of epithelial tumors.

It is helpful in distinguishing hepatocellular carcinoma (CK19-) from cholangiocarcinoma (CK19+) or metastatic carcinoma in liver(CK19+).

Rabbit Monoclonal Anti-Human
Cytokeratin 20-EP23



Colon Ca stained with Anti-Cytokeratin 20

Clone	:	EP23
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Colon Ca, Colon

Catalog#	Catalog#	Catalog#
PR036-3ml (RTU)	PR036-6ml (RTU)	—
HAR036-3ml (RTU)	HAR036-6ml (RTU)	—
CR036-0.1ml (Conc)	CR036-0.5ml (Conc)	CR036-1ml (Conc)

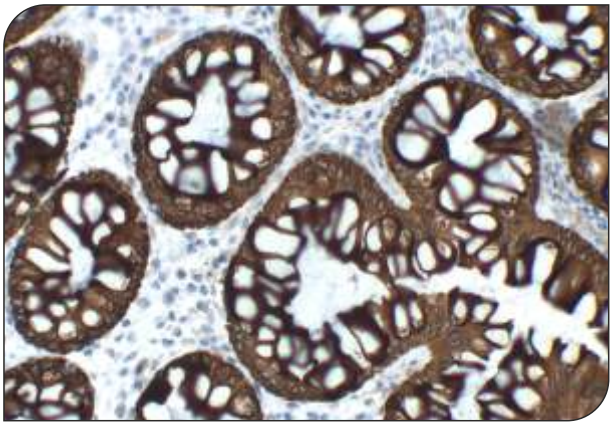
TE

Intermediate-sized filament (IF) protein designated Cytokeratin 20 (CK20) is a major cellular protein of mature enterocytes and goblet cells commonly found in mucosal epithelium of the mammalian gastrointestinal tract. Results strongly suggest that transcriptional regulation of keratin genes in the intestinal epithelium occurs at the level of both immature and terminally differentiated epithelial cells, and is tightly regulated during both fetal development and crypt to villus differentiation of the intestinal epithelium. CK20 has recently been reported to be useful to distinguish between primary and metastatic lung adenocarcinoma. CK20 expression was significantly more prevalent in adenocarcinoma that originated in the GI tract than that of pulmonary or breast origin.

Mouse Monoclonal Anti-Human
Cytokeratin 20-Ks20.8

TE

CK20 and CK7 are useful in the differentiation of ovarian metastases from colonic carcinoma and primary ovarian carcinoma.



Colon stained with Anti-Cytokeratin 20

Clone	:	Ks20.8
Isotype	:	Mouse IgG2a
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Colon Ca, Colon

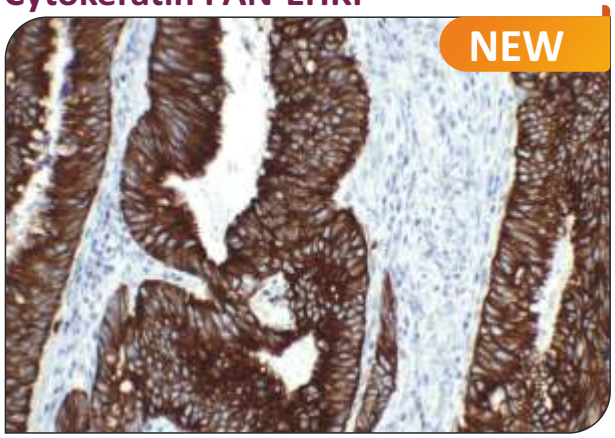
Catalog#	Catalog#	Catalog#
PM090-3ml (RTU)	PM090-6ml (RTU)	—
CM090-0.1ml (Conc)	CM090-0.5ml (Conc)	CM090-1ml (Conc)

Rabbit Monoclonal Anti-Human
Cytokeratin PAN-EHKP

TE

The keratins are the typical intermediate filament proteins of epithelia, showing an outstanding degree of molecular diversity Heteropolymeric filaments are formed by pairing of type I and type II molecules. In humans 54 functional keratin genes exist. They are expressed in highly specific patterns related to the epithelial type and stage of cellular differentiation.

This cocktail antibody can detect both type I cytokeratins and type II cytokeratin.



Colon stained with Anti-Cytokeratin PAN

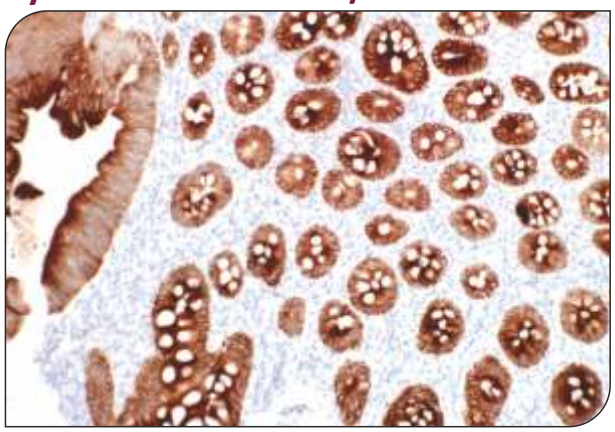
Clone	:	EHKP
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Normal Colon

Catalog#	Catalog#	Catalog#
PR367-3ml (RTU)	PR367-6ml (RTU)	—
HAR367-3ml (RTU)	HAR367-6ml (RTU)	—
CR367-0.1ml (Conc)	CR367-0.5ml (Conc)	CR367-1ml (Conc)

Mouse Monoclonal Anti-Human
Cytokeratin PAN-AE1/AE3

TE C

The antibody cocktail labels simple epithelia and their tumors including cytokeratins expressed in complex stratified squamous epithelia. Positive results aid in the classification of normal and a wide range of neoplastic tissues as epithelial in origin. This antibody serves as first tier antibody for differentiation of undifferentiated neoplasm.



Colon stained with Anti-Cytokeratin PAN

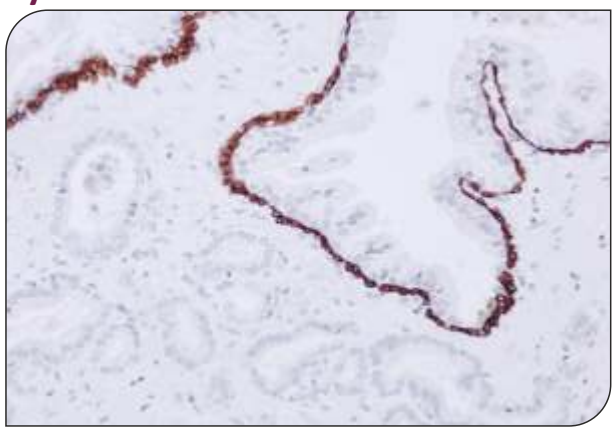
Clone	:	AE1/AE3
Isotype	:	Mouse IgG1/k+IgG2a/k
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Colon, Skin, Tonsil, Kidney, Uterus, Placenta, GI Tract

Catalog#	Catalog#	Catalog#
PM089-3ml (RTU)	PM089-6ml (RTU)	—
HAM089-3ml (RTU)	HAM089-6ml (RTU)	—
CM089-0.1ml (Conc)	CM089-0.5ml (Conc)	CM089-1ml (Conc)

Mouse Monoclonal Anti-Human
Cytokeratin HMW-34bE12

TE

The antibody reacts with keratins 1,5,10 and 14. In normal tissue, the antibody labels squamous, ductal, and other complex epithelia. The antibody has variable positivity to adenocarcinomas. The most useful application of the antibody was described in the differential diagnosis of basal cell hyperplasia and atypical adenomatous hyperplasia of the prostate. The antibody labels benign basal cells of prostate acini but not prostate adenocarcinoma. In thyroid neoplasm, positivity was reported to be confined to papillary carcinoma, whereas follicular neoplasms are negative.This antibody, when incorporated into a panel of antibodies, aids in the differential diagnosis of anaplastic tumors of unknown origin.

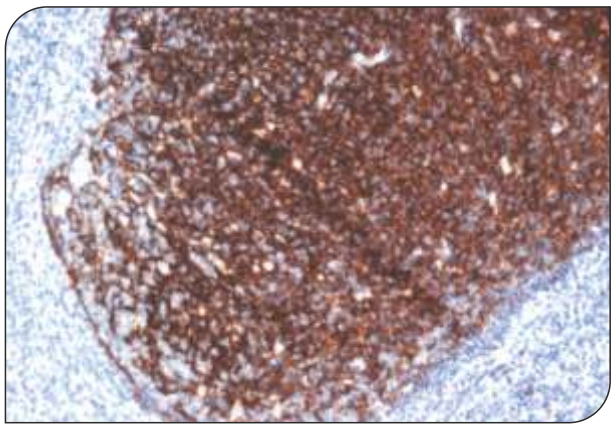


BPH stained with Anti-Cytokeratin HMW

Clone	:	34bE12
Isotype	:	Mouse IgG1
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm and Membrane
Control	:	Benign Prostate Hyperplasia (BPH), Tonsil

Catalog#	Catalog#	Catalog#
PM092-3ml (RTU)	PM092-6ml (RTU)	—
HAM092-3ml (RTU)	HAM092-6ml (RTU)	—
CM092-0.1ml (Conc)	CM092-0.5ml (Conc)	CM092-1ml (Conc)

Rabbit Monoclonal Anti-Human
Clusterin-EP181



Tonsil stained with Anti-Clusterin

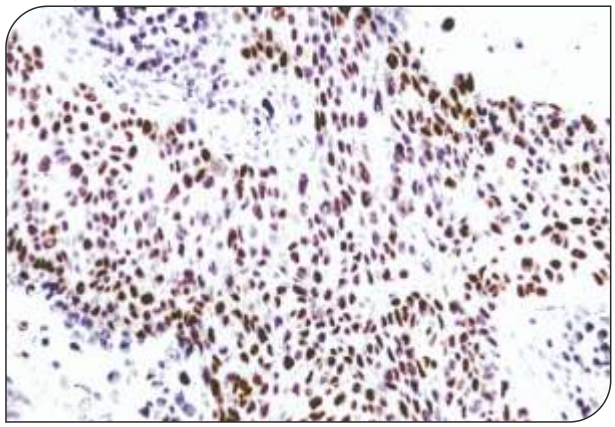
Clone	:	EP181
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Tonsil, Breast Ca

Catalog#	Catalog#	Catalog#
PR222-3ml (RTU)	PR222-6ml (RTU)	—
HAR222-3ml (RTU)	HAR222-6ml (RTU)	—
CR222-0.1ml (Conc)	CR222-0.5ml (Conc)	CR222-1ml (Conc)

C TE

Clusterin (apolipoprotein J) is a 75 - 80 kDa disulfide linked heterodimeric protein associated with the clearance of cellular debris and apoptosis. It is a stress induced cytoprotective chaperone protein regulated by HSF1 and functions similarly to a small heat shock protein. Clusterin is distributed widely in human tissues and fluids, including normal epithelial cells, plasma, cerebrospinal fluid, breast milk, semen and urine. Clusterin is expressed in a wide variety of hematopoietic and non-hematopoietic tumors. It is present in 80-100% of systemic anaplastic large cell lymphomas. Adding clusterin to antibody panels designed to distinguish systemic anaplastic large cell lymphoma from classical Hodgkin's disease is useful. In a study by Grogg et al. on 202 spindle cell tumors, Clusterin was found to be highly sensitive and specific for follicular dendritic cell tumors. Overexpression of Clusterin is associated with poor prognosis and recurrence in breast cancer. Expression of Clusterin in cervical cancer is correlated with chemosensitivity and predicts poor survival.

Rabbit Monoclonal Anti-Human
c-Myc-EP121



Lung Ca stained with Anti-c-Myc

Clone	:	EP121
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus or Cytoplasm
Control	:	Lung Ca, Burkitt Lymphoma, Breast Ca, Stomach Ca

Catalog#	Catalog#	Catalog#
PR034-3ml (RTU)	PR034-6ml (RTU)	—
HAR034-3ml (RTU)	HAR034-6ml (RTU)	—
CR034-0.1ml (Conc)	CR034-0.5ml (Conc)	CR034-1ml (Conc)

E

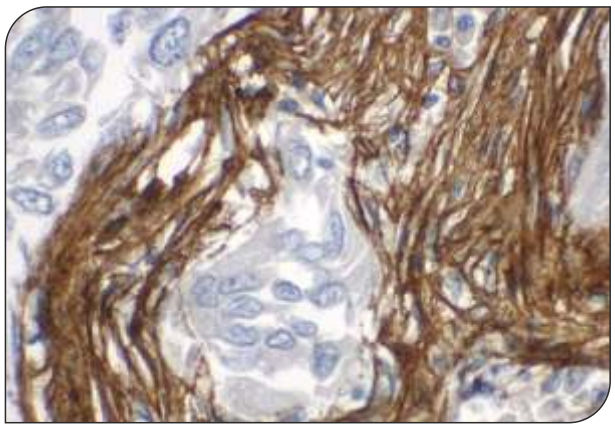
The cMyc gene is located at chromosome 8q24. It is required for progression through the cell cycle and promotes cellular proliferation. The t (8;14) (q24;q32) translocation and the cMyc/immunoglobulin heavy chain (IGH) fusion gene are not only in Burkitt lymphoma, but are also seen in diffuse large B-cell lymphoma, blastic mantle cell lymphoma, and transformed follicular lymphoma. In another study on predicting cMyc translocation in 17 cases of Burkitt lymphomas (BLs) and 19 cases of diffuse large B cell lymphomas (DLBcls), Ruzinova et al. reported that the sensitivity and specificity of this cMyc antibody on identifying tumor harboring a cMyc rearrangement reached 96% and 90% respectively. This novel cMyc antibody is a useful tool for identifying aggressive B-cell lymphomas.

E-EDTA BUFFER

TE-TRIS-EDTA BUFFER

C-CITRATE BUFFER

Rabbit Monoclonal Anti-Human
COL1A1-EP236



Esophagus stained with Anti-COL1A1

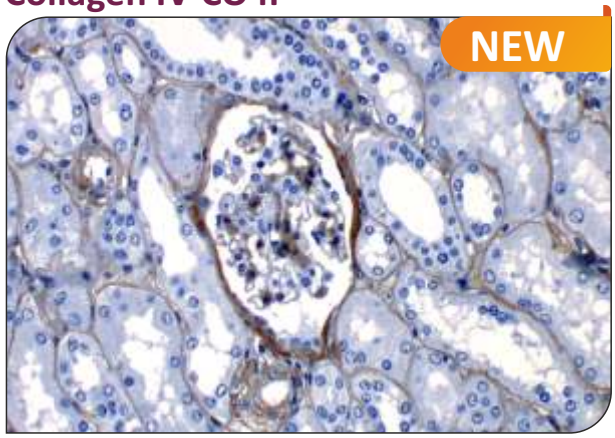
Clone	:	EP236
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Breast Ca, Skin, Colon, Esophagus

Catalog#	Catalog#	Catalog#
PR270-3ml (RTU)	PR270-6ml (RTU)	—
HAR270-3ml (RTU)	HAR270-6ml (RTU)	—
CR270-0.1ml (Conc)	CR270-0.5ml (Conc)	CR270-1ml (Conc)

TE

COL1A1 comprises the pro-alpha 1 chains of type I collagen whose triple helix comprises two alpha 1 chains and one alpha 2 chain. Type 1 collagen is a fibril forming collagen found in most connective tissues. Mutations in COL1A1 are associated with osteogenesis imperfecta types I-IV, Ehlers-Danlos syndrome type VIIA, Ehlers-Danlos syndrome Classical type, Caffey disease and idiopathic osteoporosis. COL1A1 mutations are also associated with a particular type of skin tumor called Dematofibrosarcoma protuberans (DFSP), resulting from upregulated expression of the growth factor. A suppressive biological function of COL1A1 in glioma progression has also been reported.

Rabbit Monoclonal Anti-Human
Collagen IV-CO4P



Kidney stained with Anti-Collagen IV

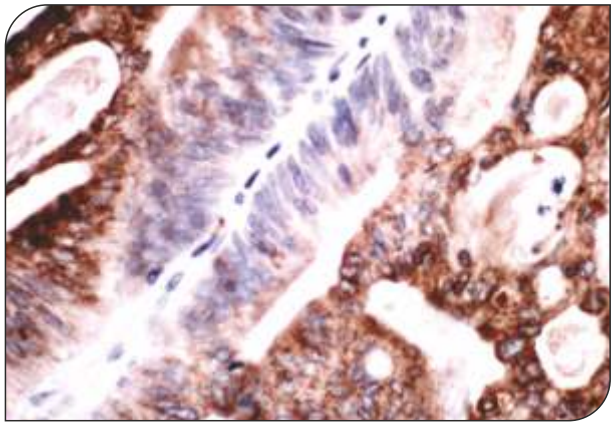
Clone	:	CO4P
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Membrane or Cytoplasm
Control	:	Kidney, Liver, RCC

Catalog#	Catalog#	Catalog#
PR297-3ml (RTU)	PR297-6ml (RTU)	—
HAR297-3ml (RTU)	HAR297-6ml (RTU)	—
CR297-0.1ml (Conc)	CR297-0.5ml (Conc)	CR297-1ml (Conc)

TE

Collagen type IV is a major component of the basement membrane and plays an important role in cell adhesion, migration, differentiation and growth. Collagen type IV express at the basement membrane I a variety of tissues including kidney, muscle, lymph nodes, lung, tendon and spleen. Collagen type IV has been shown to be useful in differentiating microinvasive from in situ ductal carcinomas of the breast. Other collagen type IV studies include use in pancreatic adenocarcinoma and chronic pancreatitis, nephrosclerosis and other kidney diseases, oral squamous cell carcinoma, laryngeal cancers, ovarian cancers and cervical cancers.

Rabbit Monoclonal Anti-Human
COX2-EP293



Colon Ca stained with Anti-COX2

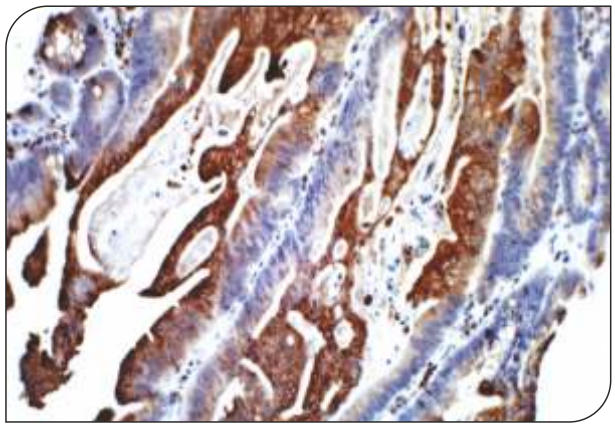
Clone	:	EP293
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Colon Ca, Stomach Ca, HCC

Catalog#	Catalog#	Catalog#
PR180-3ml (RTU)	PR180-6ml (RTU)	—
HAR180-3ml (RTU)	HAR180-6ml (RTU)	—
CR180-0.1ml (Conc)	CR180-0.5ml (Conc)	CR180-1ml (Conc)

TE

COX2, also known as prostaglandin endoperoxidase synthase 2 (PTGS2), is an immediate early gene that encodes a critical enzyme for the conversion of arachidonic acids to prostaglandins. COX2 derived prostanoids have been shown to increase resistance to apoptosis, promote angiogenesis, induce metastasis and invasion, and impair immune surveillance. Immunohistochemical expression of COX2 has been described in multiple tissue types. While COX2 expression is limited in most normal tissues, it is induced by various stimuli and elevated during inflammatory responses. Reports have associated COX2 expression with cancers from multiple tissues. Lung, colon, gastric, prostate, and breast carcinomas were described to have elevated levels of COX2. Further, elevated COX2 levels has been associated with poor prognosis and decreased survival in patients with breast cancer.

Rabbit Monoclonal Anti-Human
COX2-SP21



Colon Ca stained with Anti-COX2

Clone	:	SP21
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm and Membrane
Control	:	Colon Ca, Stomach Ca, HCC, Lung, Colon

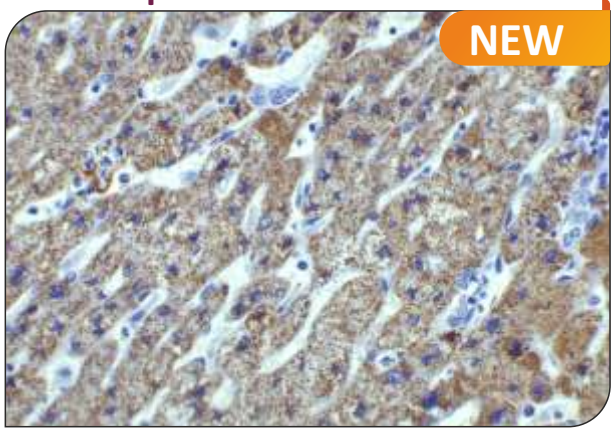
Catalog#	Catalog#	Catalog#
PR196-3ml (RTU)	PR196-6ml (RTU)	—
HAR196-3ml (RTU)	HAR196-6ml (RTU)	—
CR196-0.1ml (Conc)	CR196-0.5ml (Conc)	CR196-1ml (Conc)

TE

COX2 (Cyclooxygenase 2) is an inducible enzyme. It is involved in the response of cells to growth factors, tumor promoters, and cytokines that induce its expression. Given its role in synthesizing prostaglandins, COX2 is therefore of interest in studying immune response regulation. COX2 is induced by a wide variety of stimuli and was initially identified as immediate early growth response gene. In addition, COX2 expression markedly increased in 85-90% of human colorectal adenocarcinomas whereas COX1 levels remain unchanged.

Rabbit Monoclonal Anti-Human
CPS1-HepPar-1-EP265

C TE



Hepatocellular Ca stained with Anti-CPS1-HepPar-1

CPS1 is a mitochondrial enzyme that catalyzes synthesis of carbamoyl phosphate from ammonia and bicarbonate. This reaction is the first committed step of the urea cycle, which is important in the removal of excess urea from cells. CPS1 also represents a core mitochondrial nucleoid protein.

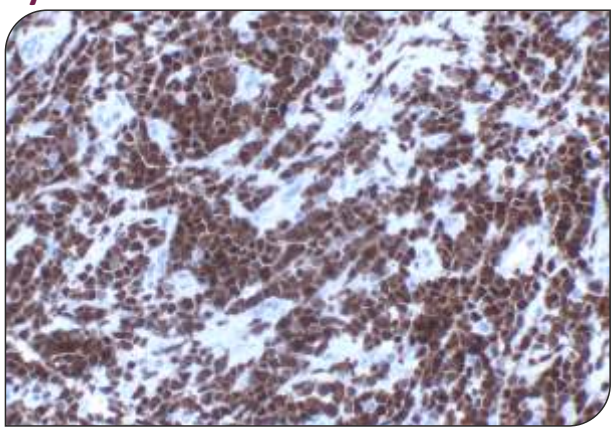
CPS1 is primarily expressed in hepatocytes in the liver. The antigen for Hep par-1 (Hepatocyte) antibody has been identified as CPS1. This CPS1 antibody shows a similar staining profile to Hep par-1 antibody, which is highly specific and sensitive for hepatocytes and derived tumors with rare positivity in hepatoid adenocarcinomas in GI tract as well as several other types of nonhepatic tumors.

Clone	:	EP265
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Hepatocellular Ca, Liver

Catalog#	Catalog#	Catalog#
PR255-3ml (RTU)	PR255-6ml (RTU)	—
HAR255-3ml (RTU)	HAR255-6ml (RTU)	—
CR255-0.1ml (Conc)	CR255-0.5ml (Conc)	CR255-1ml (Conc)

Rabbit Monoclonal Anti-Human
Cyclin D1-EP12

TE E



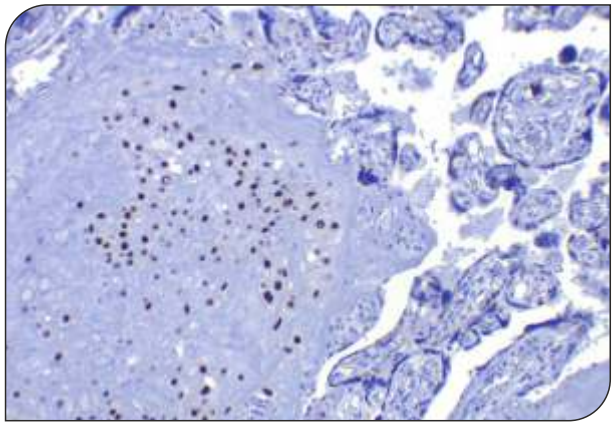
Mantle Cell Lymphoma stained with Anti-Cyclin D1

Cyclin D1 belongs to the Cyclin D family. Cyclin D1 is required for the cell cycle G1/S transition. Amplification or over expression of Cyclin D1 plays a pivotal role in the development of various human cancers including breast cancer, colon cancer, melanoma, prostate cancer, and lymphoma. It is useful to differentiate mantle cell lymphoma from small cleaved cell lymphoma. Rabbit monoclonal antibodies to Cyclin D1 showed the highest sensitivity to detect this antigen in formalin fixed paraffin embedded tissue as compared to several other clones.

Clone	:	EP12
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Thyroid, Colon Ca, Tonsil, Mantle Cell Lymphoma

Catalog#	Catalog#	Catalog#
PR035-3ml (RTU)	PR035-6ml (RTU)	—
HAR035-3ml (RTU)	HAR035-6ml (RTU)	—
CR035-0.1ml (Conc)	CR035-0.5ml (Conc)	CR035-1ml (Conc)

Rabbit Monoclonal Anti-Human
Cyclin E1-EP126



Placenta stained with Anti-Cyclin E1

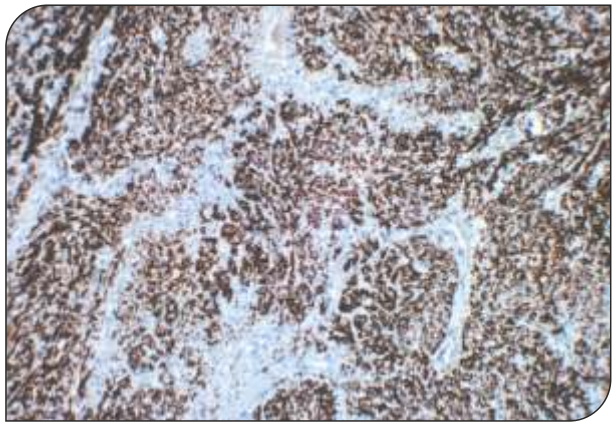
Clone	:	EP126
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Placenta, Breast Ca

Catalog#	Catalog#	Catalog#
PR178-3ml (RTU)	PR178-6ml (RTU)	—
HAR178-3ml (RTU)	HAR178-6ml (RTU)	—
CR178-0.1ml (Conc)	CR178-0.5ml (Conc)	CR178-1ml (Conc)

TE

Cyclin E1 is a member of the cyclin E family that can associate with and activate cyclin-dependent kinase CDK2. Expression of cyclin E1 is essential for the control of the cell cycle at the late G1 and early S phase. Ubiquination by the Cul-3 pathway and Fbw7 regulates cyclin E1 levels and is critically important in normal cells. In normal cells, cyclin E1 protein expression is tightly controlled through a combination of transcriptional and proteolytic regulatory processes. However, in many types of human tumors, cyclin E1 expression is frequently dysregulated, including overexpression, non-periodic expression relative to cell division, and generation of low molecular weight (LMW) derivatives. Several studies have consistently demonstrated that Cyclin E1 is associated with disease progression or patient survival in various malignancies including carcinomas of the breast, bladder, colon, and ovary. A recent study indicated that cyclin E amplification /overexpression is responsible for trastuzumab resistance in HER2 positive breast cancer patients.

Mouse Monoclonal Anti-Human
Desmin-GM007



Uterus stained with Anti-Desmin

Clone	:	GM007
Isotype	:	Mouse IgG1
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Uterus, Endomyometrium

Catalog#	Catalog#	Catalog#
PM117-3ml (RTU)	PM117-6ml (RTU)	—
HAM117-3ml (RTU)	HAM117-6ml (RTU)	—
CM117-0.1ml (Conc)	CM117-0.5ml (Conc)	CM117-1ml (Conc)

TE

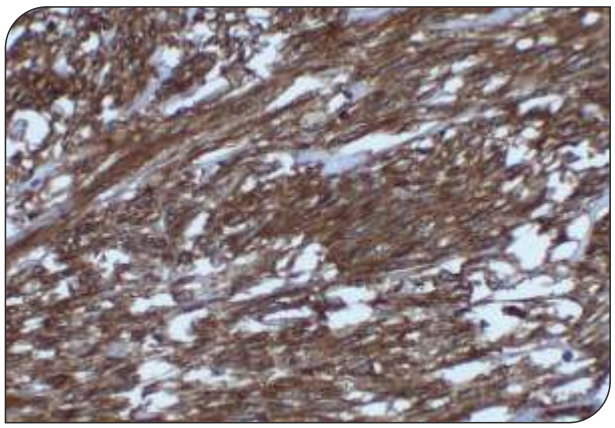
Desmin is a characteristic intermediate filament of all three types of muscle cells (skeletal, cardiac and smooth muscle) and neoplasms associated with them. In general, desmin is a specific marker for myogenic differentiation among soft tissue tumors. It is seen in the majority of rhadbomyomas, leiomyomas, rhadbomyosarcoma and leiomyosarcomas. Desmin is also seen in myofibroblasts. Myoepithelial cells typically lack desmin. The antibody labels smooth and striated muscle cells as well as mesothelial cells. It allows the subtyping of many undifferentiated and pleomorphic tumors through intermediate filament analysis. With selected panels of antibodies, it is a useful tool to separate the different pleomorphic spindle cell tumors and round cell tumors in soft tissues and skin. The antibody labels strongly reactive mesothelial cells, but not malignant mesothelioma and adenocarcinoma.

E -EDTA BUFFER

TE -TRIS-EDTA BUFFER

C -CITRATE BUFFER

Rabbit Monoclonal Anti-Human
DOG1-EP332



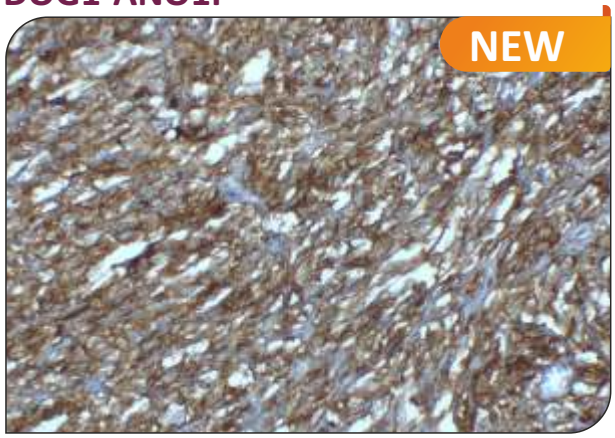
GIST stained with Anti-DOG1

Clone	:	EP332
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm and Membrane
Control	:	GIST

Catalog#	Catalog#	Catalog#
PR240-3ml (RTU)	PR240-6ml (RTU)	—
HAR240-3ml (RTU)	HAR240-6ml (RTU)	—
CR240-0.1ml (Conc)	CR240-0.5ml (Conc)	CR240-1ml (Conc)

TE DOG1, 'discovered on GIST 1' encodes for a protein of unknown function that is highly sensitive and specific for gastrointestinal stromal tumors (GIST). GISTs occur in bowel walls and proposed to originate from the interstitial cells of Cajal. The majority of GISTs harbor activating mutations in KIT but approximate 5-15% of GIST are negative for c-Kit by immunohistochemistry, mainly associated with mutations in the PDGFRA gene. Antibodies against DOG1 have shown to be highly sensitive and specific, demonstrating 98-100% reactivity to GIST. DOG1 staining pattern is cytoplasmic and membranous, staining tumor cells and interstitial cells of Cajal. Its sensitivity was deemed superior to c-Kit; many cases with PDGFRA mutations were DOG-1 positive, but failed to show c-Kit reactivity.

Rabbit Monoclonal Anti-Human
DOG1-ANO1P



GIST stained with Anti-DOG1

Clone	:	ANO1P
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Membrane and Cytoplasm
Control	:	GIST

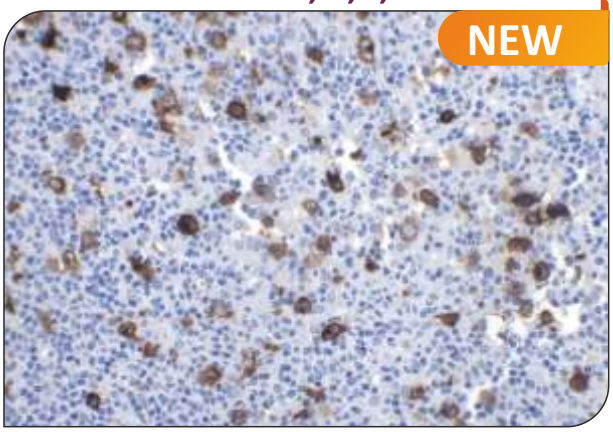
Catalog#	Catalog#	Catalog#
PR334-3ml (RTU)	PR334-6ml (RTU)	—
HAR334-3ml (RTU)	HAR334-6ml (RTU)	—
CR334-0.1ml (Conc)	CR334-0.5ml (Conc)	CR334-1ml (Conc)

TE DOG1 is a calcium-dependent chloride channel protein that is encoded by a gene called TMEM16A (TMEM16 FLJ0261, ANO1, ORAOV2, and AOS2) located on chromosome 11q13. DOG1 has many significant functions such as regulation of the cholinergic activity of gastrointestinal smooth muscle and regulation of both the survival and proliferation of cells.

DOG1 is detected in gastrointestinal Cajal cells, acinic cells in salivary glands (apical membraneous staining, particularly in serous cells), pancreatic centroacinar cells, liver cells, and epithelium of biliary tract, breast, stomach, and prostate. More than 90% of all gastrointestinal stromal tumors (GISTs) are DOG1 positive, irrespective of kit mutation and CD117 positivity. The staining pattern varies from cytoplasmic to membranous, with usually strong, diffuse intensity.

DOG1 is an important marker in the identification of GIST together with CD117, slightly more sensitive (particularly in gastric GIST without c-kit mutation) and also more specific than CD117. DOG1 is also useful in the classification of salivary carcinomas, and pancreatic and renal tumors.

Mouse Monoclonal Anti-Human
EBV-LMP1-3H2104, a,b,c



Hodgkin's Lymphoma stained with Anti-EBV

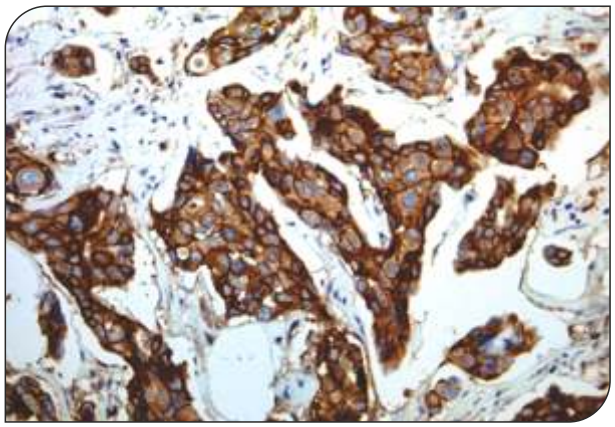
Clone	:	3H2104, a,b,c
Isotype	:	Mouse IgG1
Reactivity	:	Human, FFPE
Localization	:	Membrane
Control	:	EBV Infected Tissue, Hodgkin's Lymphoma

Catalog#	Catalog#	Catalog#
PM353-3ml (RTU)	PM353-6ml (RTU)	—
HAM353-3ml (RTU)	HAM353-6ml (RTU)	—
CM353-0.1ml (Conc)	CM353-0.5ml (Conc)	CM353-1ml (Conc)

TE

Epstein-Barr virus (EBV), also designated human herpesvirus 4 (HHV-4), is a member of the herpesvirus family and is one of the most common human viruses, infecting about 90% of the population. EBV infects only B lymphocytes and, though often asymptomatic, it can cause infectious mononucleosis, a disease characterized by fatigue, fever, sore throat and muscle soreness. The linear genome of EBV circularizes once it enters the cell and exists there as an episome. The virus can execute either a lytic cycle, which results in the staged expression viral proteins with the ultimate objective of producing infectious virions, or a latent cycle, which allows the virus to exist in a host for years. EBV may play in a role of the development of both Burkitt lymphoma, a disease in which a tumor can form on the mandible or maxilla, and nasopharyngeal carcinoma, a tumor found in the upper respiratory tract, most commonly in the nasopharynx.

Rabbit Monoclonal Anti-Human
E-Cadherin-EP6



Breast ductal Ca stained with Anti-E-Cadherin

Clone	:	EP6
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Membrane
Control	:	Breast Ductal Ca, Colon Ca, Colon

Catalog#	Catalog#	Catalog#
PR039-3ml (RTU)	PR039-6ml (RTU)	—
HAR039-3ml (RTU)	HAR039-6ml (RTU)	—
CR039-0.1ml (Conc)	CR039-0.5ml (Conc)	CR039-1ml (Conc)

TE

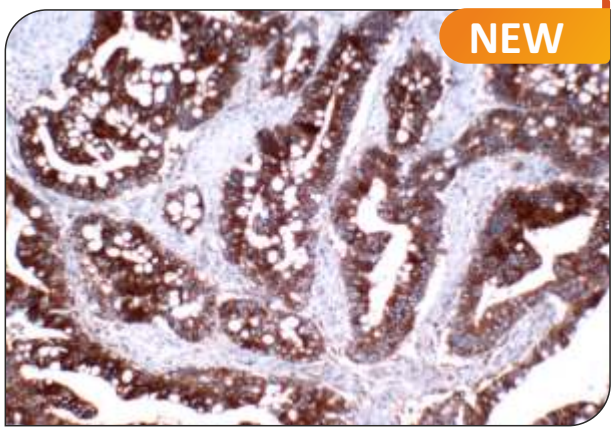
E-Cadherin is a transmembrane glycoprotein, plays an important role in epithelial cell adhesion. A decreased expression of E-Cadherin is associated with metastatic potential and poor prognosis in breast cancer and esophagus cancer. In combination with p120 Catenin or Cytokeratin, it is useful for the differentiation between ductal (E-Cadherin positive) and lobular (E-Cadherin negative) breast carcinomas. It may also help in diagnosis of mesothelioma.

E-EDTA BUFFER

TE-TRIS-EDTA BUFFER

C-CITRATE BUFFER

Rabbit Monoclonal Anti-Human
E-Cadherin-CDCAP



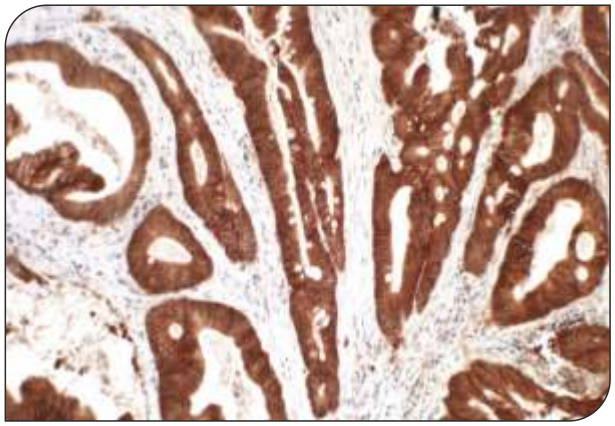
Liver stained with Anti-E-Cadherin

Clone	:	CDCAP
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Membrane
Control	:	Liver, Ovary

Catalog#	Catalog#	Catalog#
PR335-3ml (RTU)	PR335-6ml (RTU)	—
HAR335-3ml (RTU)	HAR335-6ml (RTU)	—
CR335-0.1ml (Conc)	CR335-0.5ml (Conc)	CR335-1ml (Conc)

TE E-cadherin is a transmembrane, calcium dependent cell adhesion protein that mediates cell to cell adhesion and maintains structural and functional integrity of epithelial tissues. It also has pivotal barrier functions and maintains the polarity of epithelial cells. Reduced or aberrant E-cadherin expression breaks cell to cell contacts, and thus, cells acquire the ability to migrate.In normal tissues, immunostaining of E-cadherin is localized to the membrane of epithelial cells, consistent with its role in cell adhesion. And in tumor tissues, E-cadherin stains positively in glandular epithelium as well as adenocarcinomas of the lung, gastrointestinal tract, and ovary. It has also been shown to be positive in some thyroid carcinomas.A combination of E-cadherin and p120 catenin may help distinguish ductal carcinoma of the breast from lobular carcinoma. And also, several studies have reported that reduced E-cadherin expression is correlated with poor prognosis in several types of carcinomas.

Rabbit Monoclonal Anti-Human
EGFR-EP22



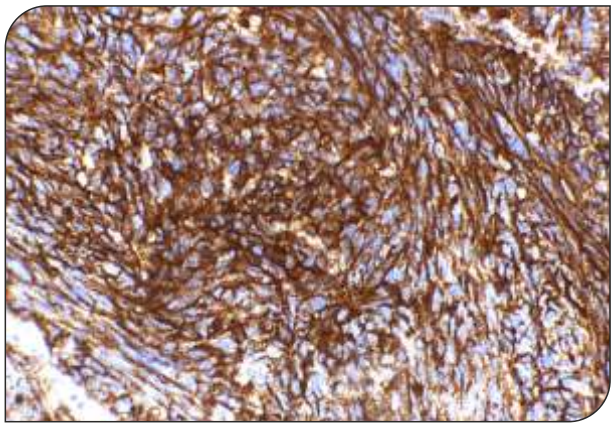
Colon Ca Stained with Anti-EGFR

Clone	:	EP22
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Membrane or Cytoplasm
Control	:	Colon Ca, Squamous Ca, Tongue, Esophagus

Catalog#	Catalog#	Catalog#
PR040-3ml (RTU)	PR040-6ml (RTU)	—
HAR040-3ml (RTU)	HAR040-6ml (RTU)	—
CR040-0.1ml (Conc)	CR040-0.5ml (Conc)	CR040-1ml (Conc)

TE Epidermal growth factor receptor (EGFR) is a 170 kDa transmembrane glycoprotein receptor tyrosine kinase that, activated by epidermal growth factor (EGF), affects cell growth and differentiation. Binding of EGF or TGF alpha to EGFR activates tyrosine kinase activity of the receptor. Phosphorylation of Tyr 992, Tyr 1068 and Tyr 1086 is required for conformational change in the C-terminal of EGFR. Autophosphorylation of Tyr 992 creates a binding site for the phospholipase C-gamma (PLC-gamma) SH2 domain, inducing downstream signaling. In breast cancer, EGFR is predominately expressed in basal cell like carcinoma, it has been recommendated for identification of basal like breast carcinoma along with Cytokeratin 5/6.

Mouse Monoclonal Anti-Human
EMA-E29



Meningioma stained with Anti-EMA

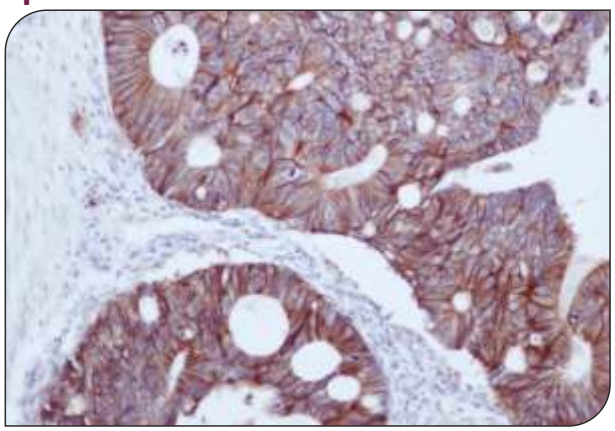
Clone	:	E29
Isotype	:	Mouse IgG2a/k
Reactivity	:	Human, FFPE
Localization	:	Membrane and Cytoplasm
Control	:	Breast Ca, Skin, Epithelioid Sarcoma Kidney, Meningioma, Colon Ca

Catalog#	Catalog#	Catalog#
PM107-3ml (RTU)	PM107-6ml (RTU)	—
HAM107-3ml (RTU)	HAM107-6ml (RTU)	—
CM107-0.1ml (Conc)	CM107-0.5ml (Conc)	CM107-1ml (Conc)

C

Epithelial membrane antigen (EMA), or CA15-3, or polymorphic epithelial mucin (PEM), or sialomucin, or episialin is a mucin like glycoprotein. EMA is valuable as a marker in the detection of breast carcinoma metastases in histological sections of liver, lymph node, and bone marrow, and is useful for differentiating anaplastic carcinoma from malignant lymphomas, and for the recognition of spindle cell epithelial malignancies.

Mouse Monoclonal Anti Human
EpCAM-Ber-EP4



Colon Ca stained with Anti-EpCAM

Clone	:	Ber-EP4
Isotype	:	Mouse IgG1/k
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Colon Ca, Thyroid

Catalog#	Catalog#	Catalog#
PM095-3ml (RTU)	PM095-6ml (RTU)	—
HAM095-3ml (RTU)	HAM095-6ml (RTU)	—
CM095-0.1ml (Conc)	CM095-0.5ml (Conc)	CM095-1ml (Conc)

TE

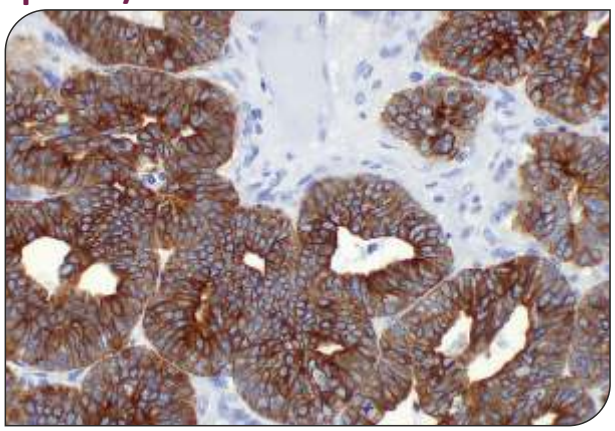
The epithelial antigen is expressed in epithelial cells and carcinomas. The antibody is a useful tool for differential diagnosis of adenocarcinoma from mesothelioma, basal cell carcinoma from squamous cell carcinomas of skin. The antibody may also aid in the detection of micrometases in lymph nodes of patients with esophageal carcinoma.

E -EDTA BUFFER

TE -TRIS-EDTA BUFFER

C -CITRATE BUFFER

Mouse Monoclonal Anti-Human
EpCAM/CD326-MOC31



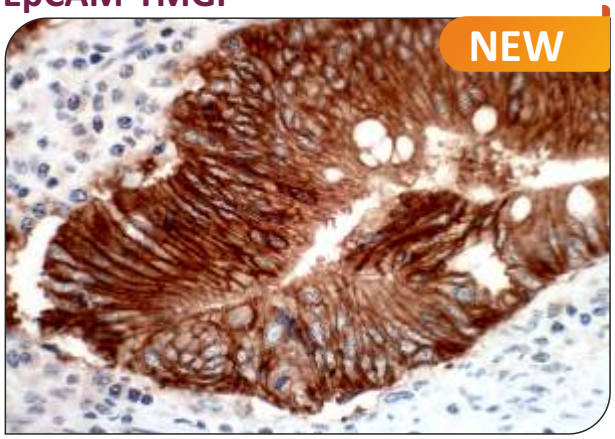
Ovarian Ca stained with Anti-EpCAM/CD326

Clone	:	MOC31
Isotype	:	Mouse IgG1,k
Reactivity	:	Human, FFPE
Localization	:	Membrane
Control	:	Colon Ca, Lung Adeno Ca, Ovarian Ca

Catalog#	Catalog#	Catalog#
PM292-3ml (RTU)	PM292-6ml (RTU)	—
HAM292-3ml (RTU)	HAM292-6ml (RTU)	—
CM292-0.1ml (Conc)	CM292-0.5ml (Conc)	CM292-1ml (Conc)

TE Binding epitope of this antibody is located in the first EGF like repeat domain (EGF1) between amino acids 27-59 of EP-CAM. EGP40 is a 40-43kDa transmembrane epithelial glycoprotein, also identified as epithelial specific antigen (ESA) or epithelial cellular adhesion molecule (EP-CAM). It is expressed on basolateral cell surface in most simple epithelia and a vast majority of carcinomas with the exception of adult squamous epithelium, hepatocytes and gastric epithelial cells. This antibody has been used to distinguish adenocarcinoma from pleural mesothelioma and hepatoccellular carcinoma. This antibody is also useful in distinguishing serous carcinoma of the ovary from mesothelioma.

Rabbit Monoclonal Anti-Human
EpCAM-TMGP



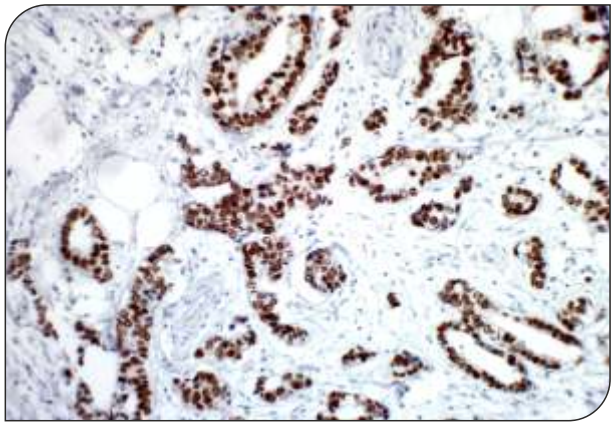
Colon stained with Anti-EPCAM

Clone	:	TMGP
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Membrane
Control	:	Colon, Appendix

Catalog#	Catalog#	Catalog#
PR336-3ml (RTU)	PR336-6ml (RTU)	—
HAR336-3ml (RTU)	HAR336-6ml (RTU)	—
CR336-0.1ml (Conc)	CR336-0.5ml (Conc)	CR336-1ml (Conc)

TE Epithelial cell adhesion molecule (EpCAM) is a transmembrane glycoprotein, may act as a physical homophilic interaction molecule between intestinal epithelial cells (IECs) and intraepithelial lymphocytes (IELs) at the mucosal epithelium for providing immunological barrier as a first line of defense against mucosal infection. It plays a role in embryonic stem cells proliferation and differentiation, and it up-regulates the expression of FABP5, MYC and cyclins A and E.This glycoprotein is located on the cell membrane surface (preferentially basolaterally) and in the cytoplasm of virtually all epithelial cells with the exception of most squamous epithelia, hepatocytes, renal proximal tubular cells, gastric parietal cells and myoepithelial cells. However, focal positivity may be seen in the basal layer of squamous cell epithelium of endoderm (e.g., palatine tonsils) and mesoderm (e.g., uterine cervix). Normal mesothelial cells are EpCAM negative, but may express focal reaction when undergoing reactive changes. EpCAM has been seen in the majority of epithelial neoplasms, whereas most non-epithelial neoplasms do not show EpCAM expression.In conjunction with other markers, EpCAM can be used as an aid in determining neoplasms of epithelial origin, such as distinguishing between lung adenocarcinoma and mesothelioma.

Rabbit Monoclonal Anti-Human
Estrogen Receptor-EP1



Breast Ca stained with Anti-Estrogen Receptor

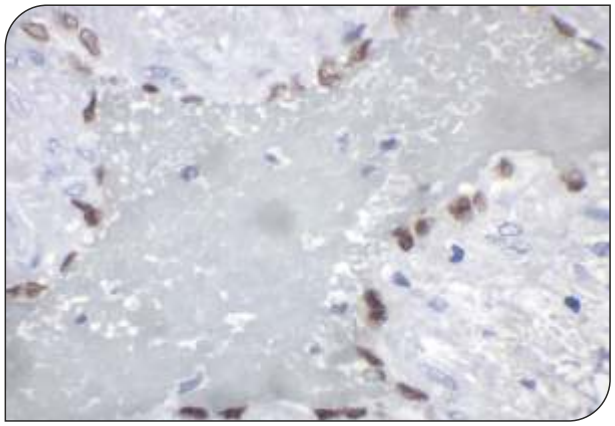
Clone	:	EP1
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Breast Ca, Breast

Catalog#	Catalog#	Catalog#
PR042-3ml (RTU)	PR042-6ml (RTU)	—
HAR042-3ml (RTU)	HAR042-6ml (RTU)	—
CR042-0.1ml (Conc)	CR042-0.5ml (Conc)	CR042-1ml (Conc)

TE

Estrogen receptor alpha (ER alpha) is a ligand-activated transcription factor and member of the steroid hormone receptor family. It possesses highly conserved DNA binding and ligand binding domains for hormone binding, exerting a significant role in activating the transcription of certain genes. ER alpha binds to estrogen response elements (ERE) to regulate estrogen-responsive gene, expression. Ligand-dependent dimerization and phosphorylation In both function to regulate the transcriptional activation of ER alpha. Phosphorylation of serines 104 and 106, located in the N-terminal transcription activation function-1 domain (AF-1), regulates ER alpha activity. It is a prognostic marker for breast cancer because ER alpha is present in the mammary gland.

Rabbit Monoclonal Anti-Human
ERG-EP111



Prostate Ca stained with Anti-ERG

Clone	:	EP111
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Prostate Ca, Placenta

Catalog#	Catalog#	Catalog#
PR044-3ml (RTU)	PR044-6ml (RTU)	—
HAR044-3ml (RTU)	HAR044-6ml (RTU)	—
CR044-0.1ml (Conc)	CR044-0.5ml (Conc)	CR044-1ml (Conc)

TE

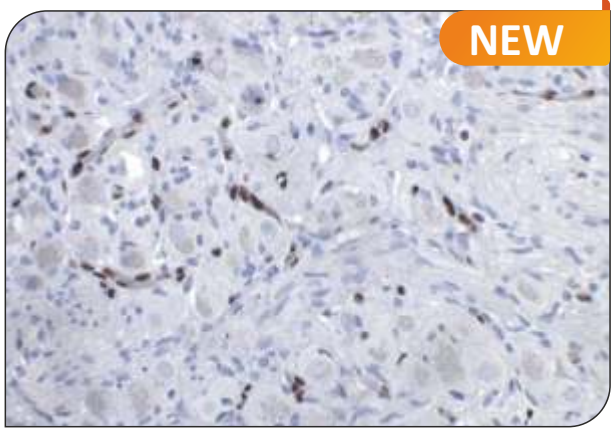
ERG, the ETS related gene, belongs to the ETS family that plays important roles in cell development, differentiation, proliferation, apoptosis, and tissue remodeling. TMPRSS2-ERG fusion, which occurs on account of translocations and interstitial deletions, is implicated in aggressive forms of prostate cancer. Eighty percent of prostate tumors contain genomic fusions of TMPRSS2 and members of the ETS family of transcription factors. Of these, about 50% contain TMPRSS2-ERG fusions. Prostate cancers with TMPRSS2-ERG fusion have been found to have five morphological features : blue tinged mucin, cribriform growth pattern, macronucleoli, intraductal tumor spread, and signet ring cell features. ERG overexpression is associated with aggressive tumor behavior and patient survival in prostate cancer.

E -EDTA BUFFER

TE -TRIS-EDTA BUFFER

C -CITRATE BUFFER

Rabbit Monoclonal Anti-Human
ERG-ETSP



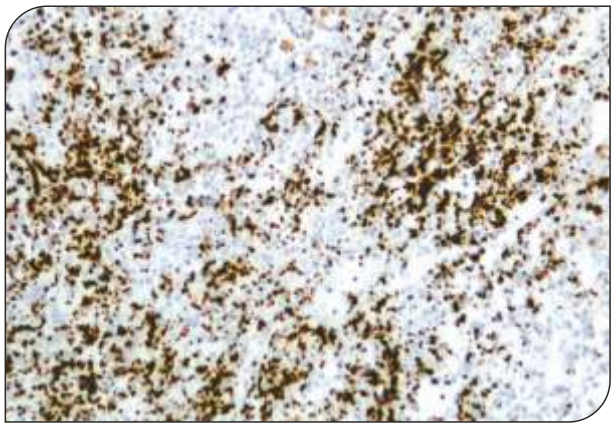
Prostate Ca stained with Anti-ERG

Clone	:	ETSP
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Placenta, Prostate Ca, Angiosarcoma, Appendix

Catalog#	Catalog#	Catalog#
PR337-3ml (RTU)	PR337-6ml (RTU)	—
HAR337-3ml (RTU)	HAR337-6ml (RTU)	—
CR337-0.1ml (Conc)	CR337-0.5ml (Conc)	CR337-1ml (Conc)

TE ERG (ETS-related gene) is a proto-oncogene, a member of the ETS family of transcription factors. The ERG gene encodes for a nuclear protein, also called ERG, which is involved in hematopoietic and endothelial development. ERG remains constitually expressed in endothelial cells in blood and lymphatic vessels, and in bone marrow stem cells.ERG is expressed in virtually all endothelial neoplasms including haemangioendothelioma, angiosarcoma and Kaposi sarcoma. ERG is overexpressed secondary to gene rearrangement in cases of prostate adenocarcinoma, gastrointestinal stromal tumour, synovial sarcoma, meningioma, epithelioid sarcoma, malignant rhabdoid tumour, acute myeloid leukemia and blastic extramedullary myeloid tumor, and rarely Ewing sarcoma / primitive peripheral neuroectodemal tumour, chondrosarcoma, osteosarcoma, and rhabdomyosarcoma.For the identification of endothelial differentiation ERG seems more sensitive and specific than any other marker. Moreover, the interpretation is often easier due to the nuclear reaction, which also allows for double stains with cytoplasmic markers like podoplanin. Among carcinomas, ERG is highly specific for prostate, while the sensitivity is moderate.

Rabbit Monoclonal Anti-Human
Factor XIII A-EP292



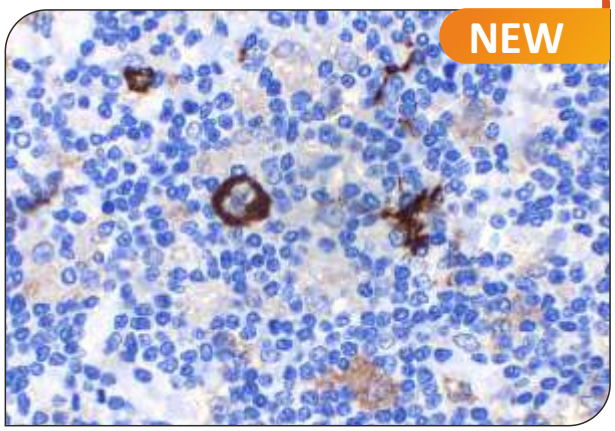
Spleen stained with Anti-Factor XIII A

Clone	:	EP292
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Spleen, Fibrous Histiocytoma

Catalog#	Catalog#	Catalog#
PR185-3ml (RTU)	PR185-6ml (RTU)	—
HAR185-3ml (RTU)	HAR185-6ml (RTU)	—
CR185-0.1ml (Conc)	CR185-0.5ml (Conc)	CR185-1ml (Conc)

C FactorXIII (plasma transglutaminase, fibrin stabilizing factor) is a glycoprotein that circulates in blood as a tetramer, consisting of two A and two B subunits. Subunit A of factor XIII is an unglycosilated 730-residue peptide with a molecular mass of 83 kD. It is the last enzyme generated in the blood coagulation cascade and is the zymogen for fibrinoligase, a transglutaminase that forms intramolecular gamma-glutamyl-epsilon-lysine crosslinking between fibrin molecules and thus stabilizes blood clots. Factor XIII A is present in plasma, platelets, and monocytes, as well as macrophages and bone marrow precursors of these cell types and selective expression in subsets of stromal inflammatory cells. Factor XIII A is a marker for alternatively activated in macrophages, while absence of Factor XIII A in monocyte derived macrophages is an indicator of their activated state in addition, Factor XIII A is useful in distinguishing malignant fibrous histiocytoma (positive) from soft tissue tumor (negative).

Mouse Monoclonal Anti-Human
Fascin 1-SPM133



Hodgkin's Lymphomas stained with Anti-Fascin 1

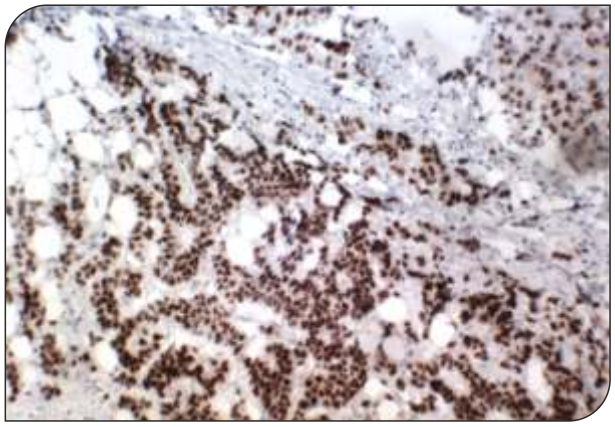
Clone	:	SPM133
Isotype	:	Mouse IgG2a/k
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Hodgkin's Lymphomas

Catalog#	Catalog#	Catalog#
PM293-3ml (RTU)	PM293-6ml (RTU)	—
HAM293-3ml (RTU)	HAM293-6ml (RTU)	—
CM293-0.1ml (Conc)	CM293-0.5ml (Conc)	CM293-1ml (Conc)

TE

Recognizes a protein of 55kDa, which is identified as Fascin1. Its actin binding ability is regulated by phosphorylation. Antibody to Fascin1 is a very sensitive marker for Reed-Sternberg cells and variants in nodular sclerosis, mixed cellularity, and lymphocyte depletion Hodgkin's disease. It is uniformly negative in lymphoid cells, plasma cells, and myeloid cells. Fascin1 is also expressed in dendritic cells. This marker may be helpful to distinguish between Hodgkin lymphoma and non-Hodgkin lymphoma in difficult cases. Also, the lack of expression of Fascin1 in the neoplastic follicles in follicular lymphoma may be helpful in distinguishing these lymphomas from reactive follicular hyperplasia in which the number of follicular dendritic cells is normal or increased. Antibody to Fascin1 has been suggested as a prognostic marker in neuroendocrine neoplasms of the lung as well as in ovarian cancer. Fascin1 expression may be induced by Epstein Barr virus (EBV) infection of B cells with the possibility that viral induction of Fascin in lymphoid or other cell types must also be considered in EBV positive cases.

Rabbit Monoclonal Anti-Human
FOXA1-EP277



Breast Ca stained with Anti-FOXA1

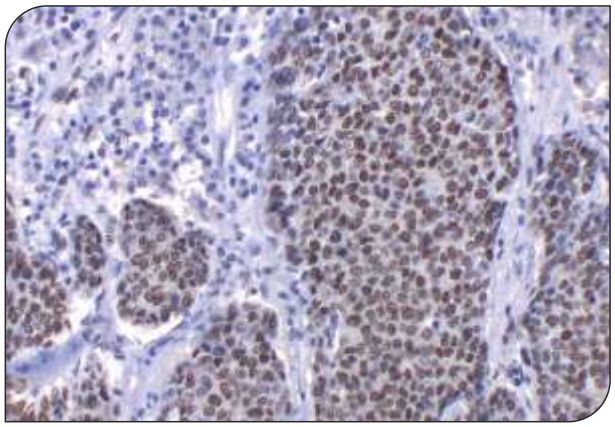
Clone	:	EP277
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Breast Ca

Catalog#	Catalog#	Catalog#
PR247-3ml (RTU)	PR247-6ml (RTU)	—
CR247-0.1ml (Conc)	CR247-0.5ml (Conc)	CR247-1ml (Conc)

E TE

The transcription factor Forkhead box A1 (FOXA1), also known as hepatocyte nuclear factor 3-alpha, is a member of the FOX class of transcription factors. FOXA1 has been identified as a hepatocyte enriched factor required for the expression of transthyretin and a1- anti-trypsin. Recently, FOXA1 has been shown to be a major determinant of estrogen ER activity and endocrine response in breast cancer cells. FOXA1 expression correlates with estrogen receptor (ER) positivity, especially in luminal subtype A breast cancers, which is associated with favorable prognosis.

Rabbit Monoclonal Anti-Human
FOXP1-EP137



Breast Ca stained with Anti-FOXP1

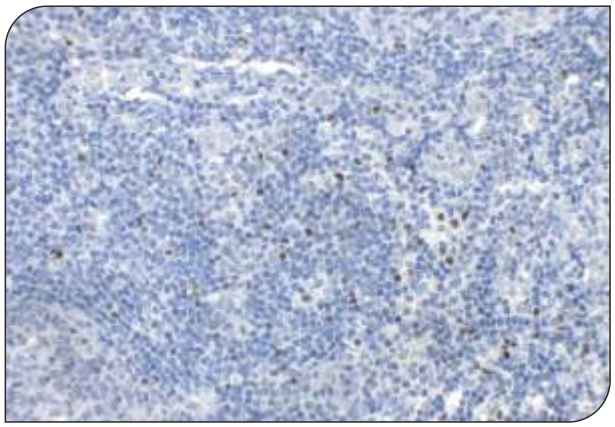
Clone	:	EP137
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus or Cytoplasm
Control	:	Breast Ca, Tonsil, Diffuse Large B-Cell, Lymphoma

Catalog#	Catalog#	Catalog#
PR248-3ml (RTU)	PR248-6ml (RTU)	—
HAR248-3ml (RTU)	HAR248-6ml (RTU)	—
CR248-0.1ml (Conc)	CR248-0.5ml (Conc)	CR248-1ml (Conc)

TE

The FOXP1 protein belongs to a functionally diverse family of winged helix or forkhead transcription factors that have diverse roles in cellular proliferation, differentiation and neoplastic transformation. The FOXP1 gene has been mapped to chromosome 3p14.1, a region that commonly shows loss of heterozygosity in a wide range of tumors and is reported to contain a tumor suppressor gene (s). The FOXP1 protein is widely expressed in normal human tissues. It labels activated B cells in the mantle zone and germinal center of lymphoid tissues. In lymphoid malignancies, FOXP1 protein expression may be found in diffuse large B-cell lymphomas and extranodal marginal zone B-cell lymphomas of mucosa associated lymphoid tissue (MALT). Strong expression of FOXP1 is associated with poor disease free survival and transformation to diffuse large B-cell lymphomas.

Rabbit Monoclonal Anti-Human
FOXP3-EP340



Tonsil stained with Anti-FOXP3

Clone	:	EP340
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Tonsil, Thymus, Hodgkin's Lymphoma

Catalog#	Catalog#	Catalog#
PR271-3ml (RTU)	PR271-6ml (RTU)	—
HAR271-3ml (RTU)	HAR271-6ml (RTU)	—
CR271-0.1ml (Conc)	CR271-0.5ml (Conc)	CR271-1ml (Conc)

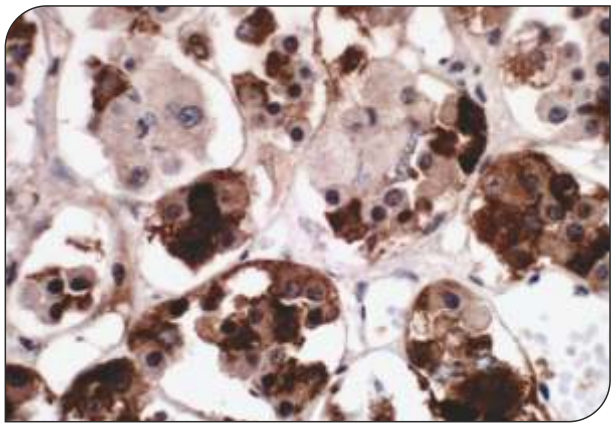
TE

FOXP3 is a member of the forkhead box (FOX) transcription factors, found to be a regulator in the development and function of regulatory T-cells (Treg). While FOXP3 has been widely accepted as the best marker for Treg identification, it can also be transiently expressed on non-regulatory CD4+ T-cells upon T-cell antigen receptor activation, and in non-lymphocytic normal or cancer cells. Tregs are defined as immunosuppressive T-cells that can mediate local suppression of anti-tumor immunity and also inhibit functions of dendritic cells, natural killer cells, and B-cells. Recruitment of Tregs into tumors has been suggested as one of the mechanisms by which malignant cells evade host immunity. Treg tumor infiltration, an enlarged pool of Treg in the peripheral blood, and draining lymph nodes have been observed in multi cancer types. Intratumoral FOXP3 positive T-cells were associated with a higher risk of recurrence and poor overall survival of patients with a variety of solid neoplasms. Significant tissue infiltration of Treg were also observed in cases of malignant transformation.

Rabbit Monoclonal Anti-Human
FSH-EP257

C TE

The pituitary glycoprotein hormone family includes follicle stimulating hormone, luteinizing hormone, chorionic gonadotropin and thyroid stimulating hormone. All of these glycoproteins consist of an identical alpha subunit and a hormone specific beta subunit. FSH-beta is the beta subunit of follicle stimulating hormone. In conjunction with luteinizing hormone, follicle stimulating hormone induces egg and sperm production.



Pituitary stained with Anti-FSH

Clone	:	EP257
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Pituitary, Pituitary Ca

Catalog#	Catalog#	Catalog#
PR191-3ml (RTU)	PR191-6ml (RTU)	—
HAR191-3ml (RTU)	HAR191-6ml (RTU)	—
CR191-0.1ml (Conc)	CR191-0.5ml (Conc)	CR191-1ml (Conc)

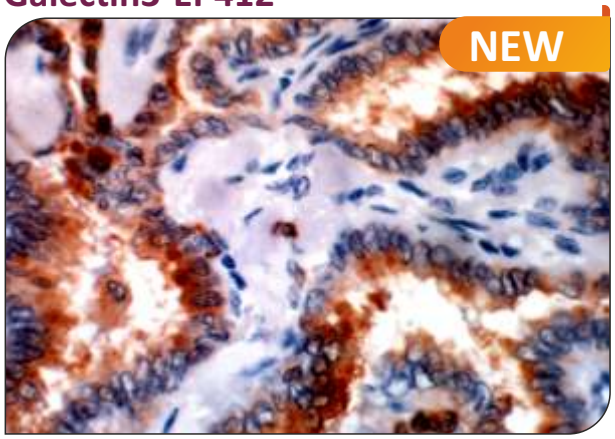
Rabbit Monoclonal Anti-Human
Galectin3-EP412

TE

Galectin-3 (GAL3), encoded by LGALS3, is a structurally unique member of the ancient galectin family of b-galactoside-binding lectins. In addition to a carbohydrate binding domain, GAL3 can form oligomers through a proline and glycine-rich N-terminus. GAL3 is involved in many biological processes, such as cell growth, cell differentiation, cell-cell and cell-matrix adhesion interactions, angiogenesis, and apoptosis. GAL3 can be found in many different types of cells and tissues. It is located in the nucleus. cytoplasm, and outside the cell via the non-classical pathway.

GAL3 has also been shown to be involved with cancer, inflammation, and heart failure-where it is associated with processes such as inflammation, myofibroblast proliferation, fibrogenesis, and tissue repair.

Due to the wide range of mechanisms surrounding GAL3 and cancer, the GAL3 antibody is a promising approach for the development of therapeutic agents for cancer treatment.



Papillary Thyroid Ca stained with Anti-Galectin3

Clone	:	EP412
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Papillary Thyroid Ca, Appendix, Lung, Breast

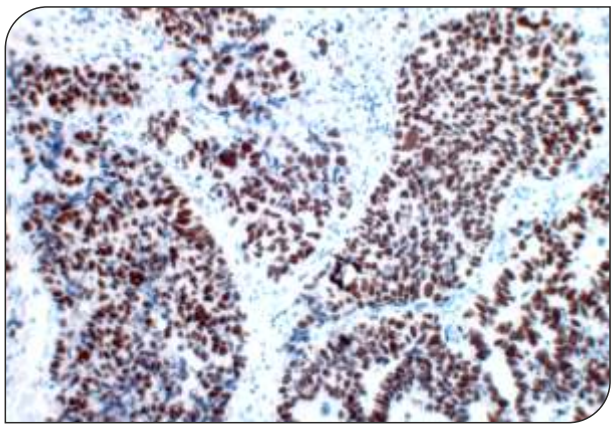
Catalog#	Catalog#	Catalog#
PR351-3ml (RTU)	PR351-6ml (RTU)	—
HAR351-3ml (RTU)	HAR351-6ml (RTU)	—
CR351-0.1ml (Conc)	CR351-0.5ml (Conc)	CR351-1ml (Conc)

E -EDTA BUFFER

TE -TRIS-EDTA BUFFER

C -CITRATE BUFFER

Mouse Monoclonal Anti-Human
GATA3-L50-823



Bladder Ca stained with Anti-GATA3

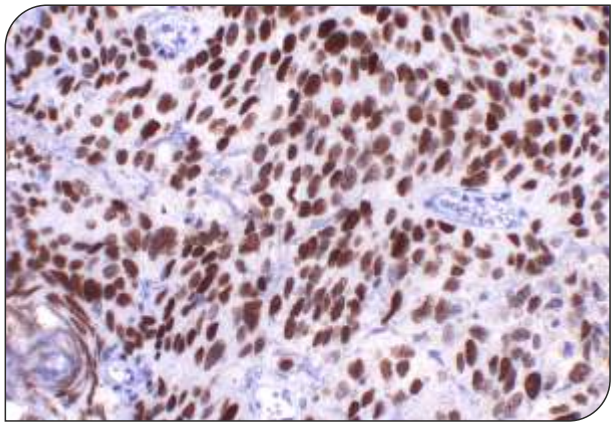
Clone	:	L50-823
Isotype	:	Mouse IgG1/k
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Urothelial Ca

Catalog#	Catalog#	Catalog#
PM199-3ml (RTU)	PM199-6ml (RTU)	—
HAM199-3ml (RTU)	HAM199-6ml (RTU)	—
CM199-0.1ml (Conc)	CM199-0.5ml (Conc)	CM199-1ml (Conc)

TE

GATA3 (GATA binding protein 3) is a member of the GATA family of transcription factors. This 50 kDa nuclear protein regulates the development and subsequent maintenance of a variety of human tissues, including hematopoietic cells, skin, kidney, mammary gland and the central nervous system. Among several other roles, GATA3 involved in luminal cell differentiation in the mammary gland and appears to control a set of genes involved in the differentiation and proliferation of breast cancer. The expression of GATA3 is associated with the expression of estrogen receptor-alpha (ER) in breast cancer. GATA3 has been shown to be a novel marker for bladder cancer. The study demonstrated that GATA3 stained 67% of urothelial carcinomas, but none of prostate or renal carcinomas.

Rabbit Monoclonal Anti-Human
GATA3-EP368



Urothelial Ca stained with Anti-GATA3

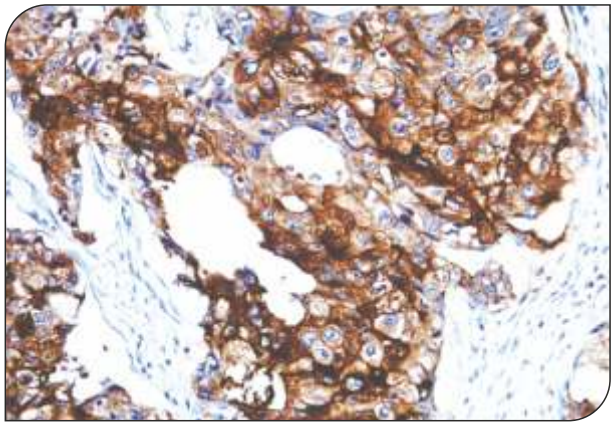
Clone	:	EP368
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Breast, Breast Ca,Urothelial Ca

Catalog#	Catalog#	Catalog#
PR273-3ml (RTU)	PR273-6ml (RTU)	—
HAR273-3ml (RTU)	HAR273-6ml (RTU)	—
CR273-0.1ml (Conc)	CR273-0.5ml (Conc)	CR273-1ml (Conc)

TE

GATA3 binding protein 3 (GATA3) is a zinc finger transcription factor that regulates the development in a variety of tissue and cell types. It has been detected in trophoblasts, epidermis, mammary and salivary glands, urothelia, distal nephron and subsets of T-lymphocytes. GATA3 has been widely investigated as a marker for breast and urothelial carcinomas. GATA3 expression was detected in the majority of primary (90%) and metastatic (87%) mammary carcinomas. Positivity in triple-negative tumors is reported lower (43-67%). GATA3 is also considered a sensitive marker in the differential diagonisis of urothelial carcinoma from prostate adenocarcinoma, labeling the majority of urothelial carcinomas (86%) and none of prostate adenocarcinoma. It also demonstrates superior sensitivity compared to other urothelialmarkers: Thrombomodulin and Uroplankin III. In a large scale analysis of 2,500 tumors, GATA3 was also detected in various epithelial and mesenchymal tumors. This marker is a sensitive but not completely specific for mammary and urothelial carcinomas.

Rabbit Monoclonal Anti-Human
GCDFP15-EP95



Breast Ca stained with Anti-GCDFP-15

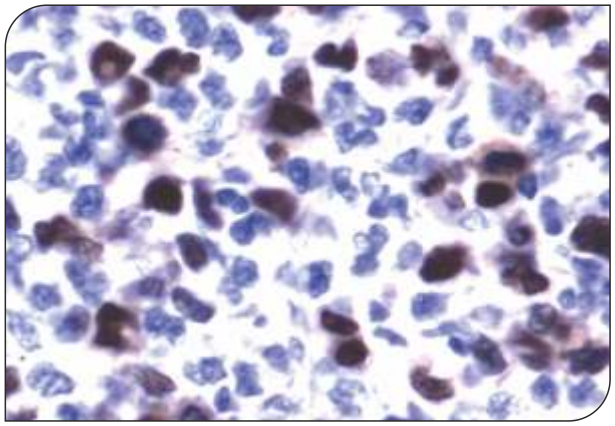
Clone	:	EP95
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Breast Ca, Skin

Catalog#	Catalog#	Catalog#
PR045-3ml (RTU)	PR045-6ml (RTU)	—
HAR045-3ml (RTU)	HAR045-6ml (RTU)	—
CR045-0.1ml (Conc)	CR045-0.5ml (Conc)	CR045-1ml (Conc)

E

Gross cystic disease fluid protein (GCDFP15), also called prolactin inducible protein (PIP) is a single polypeptide chain with a versatile function in human reproductive and immunological systems. GCDFP15 binds to CD4, exerts a potent inhibition on T-lymphocyte apoptosis mediated by CD4/T-cell receptor (TCR) activation, and carries a fibronectin specific aspartyl protease activity. It is up regulated by prolactin and androgens, while it is down regulated by estrogen. In normal adult tissues, GCDFP15 expression was found in all apocrine, lacrimal, ceruminous, and Moll's glands and in numerous serous cells of the submandibular, sublingual, and minor salivary glands. The serous cells of nasal and bronchial glands were also positive. It is used as a marker of apocrine differentiation.

Rabbit Monoclonal Anti-Human
Geminin-EP355



ALCL stained with Anti-Geminin

Clone	:	EP355
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Thymus, Tonsil, ALCL, Breast Ca

Catalog#	Catalog#	Catalog#
PR272-3ml (RTU)	PR272-6ml (RTU)	—
CR272-0.1ml (Conc)	CR272-0.5ml (Conc)	CR272-1ml (Conc)

TE

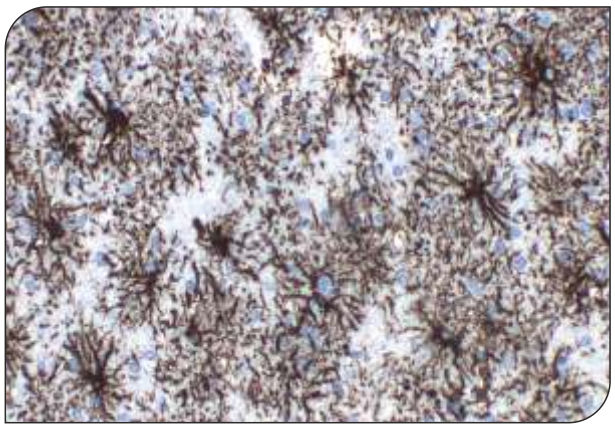
Geminin is a regulator of DNA replication. It interacts with the DNA replication initiation factor CDT1P to inhibit the initiation of DNA replication. Geminin is absent during G1 phase, accumulates during S,G2 and M phases, and disappears at the metaphase anaphase transition. Geminin is expressed in proliferating cells. Over expression of Geminin has been found in tumors and the expression of Geminin in lymphomas and carcinomas of the breast, colon and stomach is correlated with cell proliferation as measured by Ki67 staining.

E-EDTA BUFFER

TE-TRIS-EDTA BUFFER

C-CITRATE BUFFER

Rabbit Monoclonal Anti-Human
GFAP-EP13



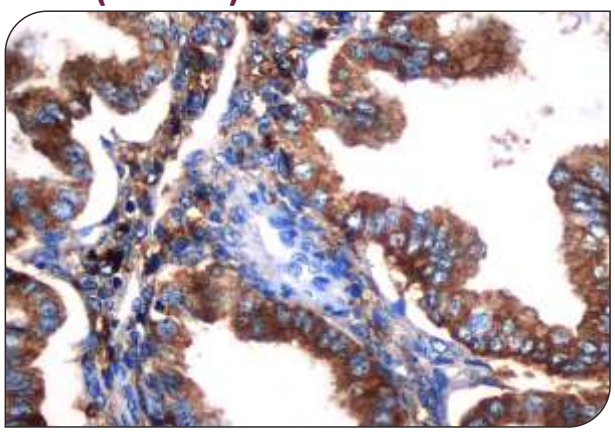
Brain stained with Anti-GFAP

Clone	:	EP13
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Brain, Astrocytoma

Catalog#	Catalog#	Catalog#
PR046-3ml (RTU)	PR046-6ml (RTU)	—
HAR046-3ml (RTU)	HAR046-6ml (RTU)	—
CR046-0.1ml (Conc)	CR046-0.5ml (Conc)	CR046-1ml (Conc)

C. Glial Fibrillary Acidic Protein (GFAP) belongs to the class III of the intermediate filament proteins highly specific to astrocytes in the brain. It is also expressed on some ependymal cells in the central nervous system and Schwann cells, enteric glial cells and satellite cells in the peripheral nervous system. GFAP is used to differentiate astrocytoma from nonglial cell tumors.

Rabbit Monoclonal Anti-Human
Glut1(SLC2A1)-EP141



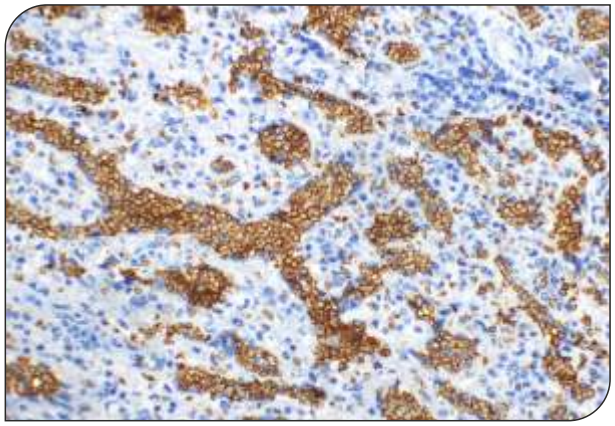
Endometrial Benign Epithelium stained with Anti-Glut1

Clone	:	EP141
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Membrane and/or Cytoplasm
Control	:	Colon, Endometrial Benign Epithelium, Placenta

Catalog#	Catalog#	Catalog#
PR139-3ml (RTU)	PR139-6ml (RTU)	—
HAR139-3ml (RTU)	HAR139-6ml (RTU)	—
CR139-0.1ml (Conc)	CR139-0.5ml (Conc)	CR139-1ml (Conc)

TE. Glucose transporters are integral membrane glycoproteins involved in transporting glucose into most cells. There are many types of glucose transport carrier proteins, designated as Glut-1 to Glut-12. Glut-1, also known as SCL2A1, is a major glucose transporter in the mammalian blood brain barrier. It is expressed in high density on the membranes of human erythrocytes and the brain capillaries that comprise the blood brain barrier. Glut-1 is expressed at variable levels in many human tissues. Overexpression of Glut-1 has been linked to tumor progression or poor survival of patients with carcinomas of the colon, breast, cervical, lung, bladder and mesothelioma. Glut-1 is a sensitive and specific marker for the differentiation of malignant mesothelioma (positive) from reactive mesothelium (negative).

Rabbit Monoclonal Anti-Human
Glycophorin A-EP213



Spleen stained with Anti-Glycophorin A

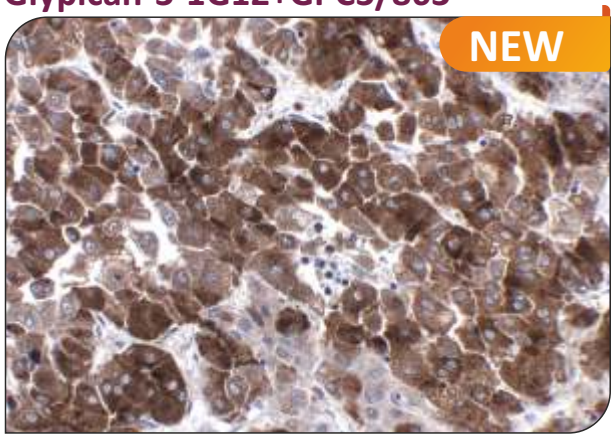
Clone	:	EP213
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Membrane
Control	:	Esophagus, Spleen

Catalog#	Catalog#	Catalog#
PR167-3ml (RTU)	PR167-6ml (RTU)	—
HAR167-3ml (RTU)	HAR167-6ml (RTU)	—
CR167-0.1ml (Conc)	CR167-0.5ml (Conc)	CR167-1ml (Conc)

TE

Glycophorin A, also known as CD235a, is the major intrinsic membrane protein of the erythrocyte. The N-terminal glycosylated segment, which lies outside of the erythrocyte membrane, has MN blood group receptors. It is important for the function of SLC4A1 and required for the high activity of SLC4A1. Glycophorin A may be involved in the translocation of SLC4A1 to the plasma membrane. It is a receptor for the influenza virus and Plasmodium falciparum erythrocyte-binding antigen 175 (EBA-175); binding of EBA-175 is dependent on sialic acid residues of the O-linked glycans. Glycophorin A is exclusively expressed on erythroid cells and their precursors. It is a useful marker for identification of erythroid differentiation in hematopoietic malignancies

Mouse Monoclonal Anti-Human
Glypican-3-1G12+GPC3/863



Hepatocellular Ca stained with Glypican-3

Clone	:	1G12+GPC3/863
Isotype	:	Mouse IgG,k
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Hepatocellular Ca, Brain, Mantle Cell Lymphoma

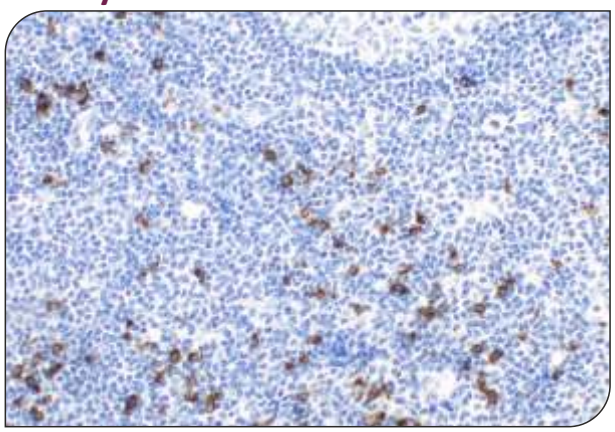
Catalog#	Catalog#	Catalog#
PM163-3ml (RTU)	PM163-6ml (RTU)	—
HAM163-3ml (RTU)	HAM163-6ml (RTU)	—
CM163-0.1ml (Conc)	CM163-0.5ml (Conc)	CM163-1ml (Conc)

TE

Glypican-3 (GPC3) is a glycosyl phospatidyl inositol-anchored membrane protein, which may also be found in a secreted form. Recently, GPC3 was identified to be useful tumor marker for the diagnosis of HCC, hepatoblastoma, melanoma, testicular germ cell tumors, and Wilms tumor. In patients with HCC, GPC3 was over expressed in neoplastic liver tissue and elevated in serum but was undetectable in normal liver, benign liver, and the serum of healthy donors. GPC3 expression was also found to be higher in HCC liver tissue than in cirrhotic liver or liver with focal lesions such as dysplastic nodules and areas of hepaticadenoma (HA) with malignant transformation. In the context of testicular germ cell tumors,GPC3 expression is up-regulated in certain histologic subtypes, specifically yolk sac tumors and choriocarcinoma. A high level of GPC3 expression has also been found in some types of embryonal tumors, such as Wilms tumor and hepatoblastoma, with a low or undetectable expression in normal adjacent tissue. Together these studies indicate that GPC3 is an important tumor marker.

Rabbit Monoclonal Anti-Human

Granzyme B-EP230



Tonsil stained with Granzyme B

Clone	:	EP230
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Tonsil, Spleen, Hodgkin's Lymphoma

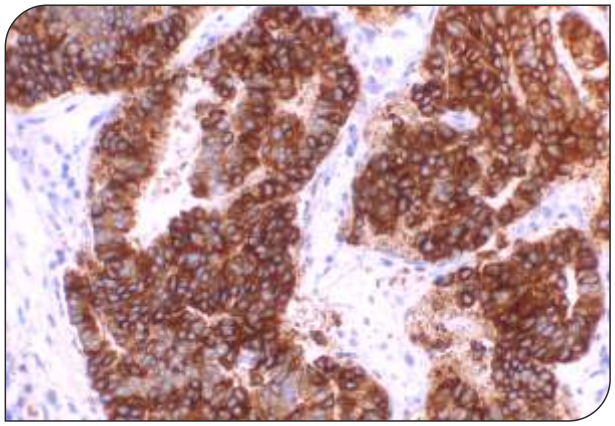
Catalog#	Catalog#	Catalog#
PR285-3ml (RTU)	PR285-6ml (RTU)	—
CR285-0.1ml (Conc)	CR285-0.5ml (Conc)	CR285-1ml (Conc)

TE

Granzyme B is a member of the granule serine protease family stored specifically in NK cells or cytotoxic T cells. Cytolytic T lymphocytes (CTL) and natural killer (NK) cells share the ability to recognize, bind and lyse specific target cells. They are thought to protect their host by lysing cells bearing on their surface 'nonself' antigens, usually peptides or proteins resulting from infection by intracellular pathogens. Granzyme B is crucial for the rapid induction of target cell apoptosis by CLTs in the cell mediated immune response.

Rabbit Monoclonal Anti-Human

GRIA2-EP387



Neuroendocrine Tumor stained with Anti GRIA-2

Clone	:	EP387
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm and Membrane
Control	:	Brain, Neuroendocrine Tumors

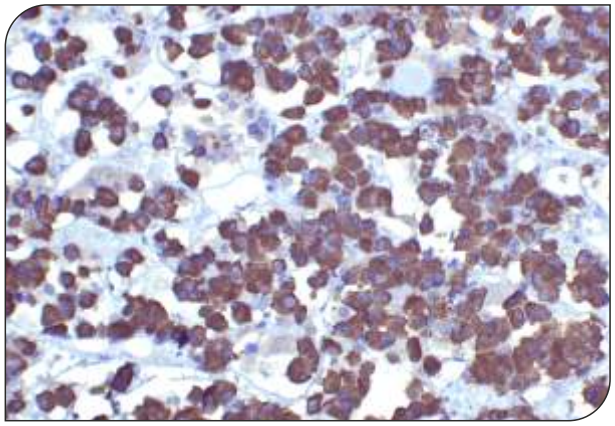
Catalog#	Catalog#	Catalog#
PR281-3ml (RTU)	PR281-6ml (RTU)	—
CR281-0.1ml (Conc)	CR281-0.5ml (Conc)	CR281-1ml (Conc)

TE

Glutamate receptor 2 (GRIA2) is a ligand gated ion channel that uses l-glutamate for excitatory synaptic transmission expressed in the central nervous system. A recent gene expression profiling study reported 100 fold GRIA2 induction in solitary fibrous tumors compared with control tissues. Immunohistochemistry studies demonstrated GRIA2 positivity in the majority of solitary fibrous tumors (64-86%). Its diagnostic performance yields 64% sensitivity, 92% specificity, with 41% and 97% positive and negative predictive value, respectively for the differential diagnosis of solitary fibrous tumors versus other mesenchymal soft tissue tumors. GRIA2 may be a useful marker to identify STAT6 negative solitary fibrous tumors.

Rabbit Monoclonal Anti-Human

Growth Hormone-EP267



Pituitary stained with Anti Growth Hormone

Clone	:	EP267
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Pituitary

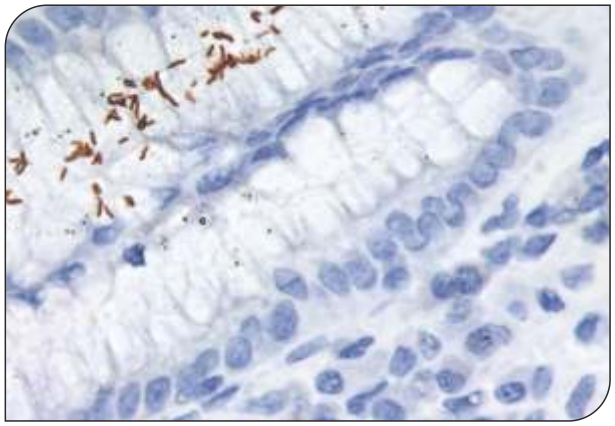
Catalog#	Catalog#	Catalog#
PR192-3ml (RTU)	PR192-6ml (RTU)	—
HAR192-3ml (RTU)	HAR192-6ml (RTU)	—
CR192-0.1ml (Conc)	CR192-0.5ml (Conc)	CR192-1ml (Conc)

C

Growth hormone (GH or hGH), also known as somatotropin or somatropin, is a peptide hormone that is produced and secreted by somatotrophs of the anterior pituitary gland. GH exerts a wide variety of biological actions in many different tissues and cell types. The actions of GH at the cellular level can be divided into three categories: those affecting mitogenesis, differentiation, and metabolism. The GH antibody specifically labels somatotrophs in pituitary in normal tissues. It is useful in classification of pituitary tumor.

Rabbit Polyclonal Anti-Human

H.pylori-Polyclonal



Stomach stained with Anti-H.pylori

Clone	:	Polyclonal
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Bacterium
Control	:	H.pylori Infected Tissue

Catalog#	Catalog#	Catalog#
PP145-3ml (RTU)	PP145-6ml (RTU)	—
HAP145-3ml (RTU)	HAP145-6ml (RTU)	—
CP145-0.1ml (Conc)	CP145-0.5ml (Conc)	CP145-1ml (Conc)

C

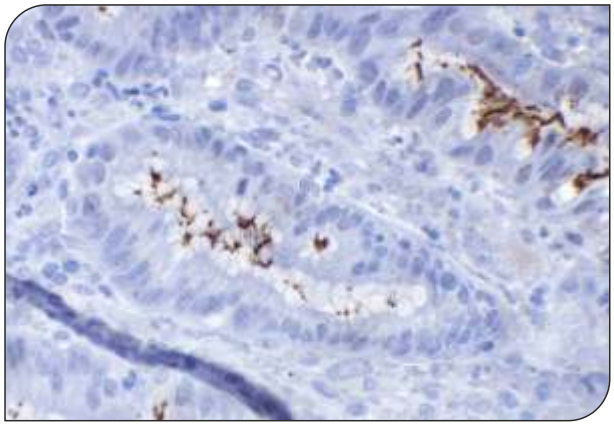
Helicobacter pylori is known to cause peptic ulcers and chronic gastritis in human. It is associated with duodenal ulcers and may be involved in development of adenocarcinoma and low grade lymphoma of mucosa associated lymphoid tissue in the stomach.

E - EDTA BUFFER

TE - TRIS-EDTA BUFFER

C - CITRATE BUFFER

Rabbit Monoclonal Anti-Human
H.pylori-EP279



Stomach stained with Anti-H.pylori

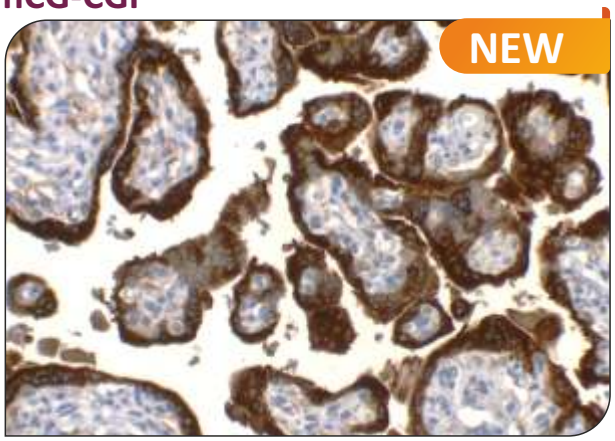
Clone	:	EP279
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Bacterium
Control	:	H.Pylori Infected Tissue

Catalog#	Catalog#	Catalog#
PR251-3ml (RTU)	PR251-6ml (RTU)	—
HAR251-3ml (RTU)	HAR251-6ml (RTU)	—
CR251-0.1ml (Conc)	CR251-0.5ml (Conc)	CR251-1ml (Conc)

C

Helicobacter pylori (H.pylori) is an endemic helix shaped Gram negative bacterium that infected over half of the world's population, reaching over 80% prevalence in developing countries. The bacterium attaches tightly to the gastric epithelia upon ingestion via unique bacterial surface components and releases urease, permitting its survival in the acidic lumen. H.pylori strains are highly diverse and virulence is mediated by the secreted exotoxin VacA and cag pathogenicity island that induces host cellular apoptosis and inflammation. H.pylori colonization is a chronic condition without specific therapy, but asymptomatic in the majority of people. Infection with H. pylori is responsible for the majority of duodenal and gastric ulcers, and have been associated with increased risk of developing mucosa associate lymphoid tissue (MALT) lymphoma, atrophic gastritis and gastric cancer. Antibody to H.pylori is useful for detecting the bacterial infection in gastric and duodenal epithelial cells. Reactivity against additional Helicobacter family bacterium has not been fully established.

Rabbit Monoclonal Anti-Human
hCG-CGP



Placenta stained with Anti-hCG

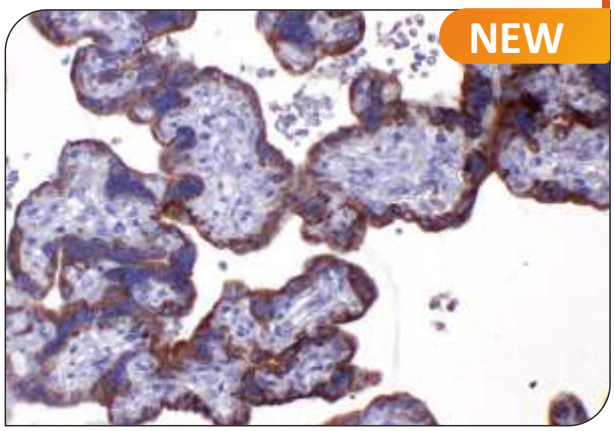
Clone	:	CGP
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Placenta, Choriocarcinoma

Catalog#	Catalog#	Catalog#
PR307-3ml (RTU)	PR307-6ml (RTU)	—
HAR307-3ml (RTU)	HAR307-6ml (RTU)	—
CR307-0.1ml (Conc)	CR307-0.5ml (Conc)	CR307-1ml (Conc)

TE

Human chorionic gonadotropin antibody (hCG) is a glycoprotein hormonesynthesized in syncytiotro- phoblastic cells of placenta and in certain trophoblastic tumors. The hormone specific alpha chains have molecular weights of 13 kDa. HCG is found in moles and choriocarcinoma, chorionic components of germ cell tumors,and syncytiotrophoblast like cells in seminoma /dysgerminoma and embryonal carcinoma. In diagnostic pathology, hCG is a useful marker for classification ofgerm cell tumors, identification of extragonadal germ cell tumors.

Rabbit Monoclonal Anti-Human
hCG-PRM131



Placenta stained with Anti-hCG

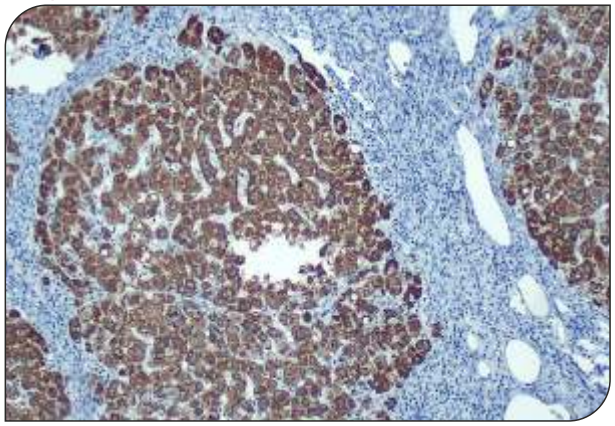
Clone	:	PRM131
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Placenta

Catalog#	Catalog#	Catalog#
PR355-3ml (RTU)	PR355-6ml (RTU)	—
HAR355-3ml (RTU)	HAR355-6ml (RTU)	—
CR355-0.1ml (Conc)	CR355-0.5ml (Conc)	CR355-1ml (Conc)

TE

Human chorionic gonadotropin (hCG) is a placental hormone that stimulates secretion of the pregnancy-sustaining steroid progesterone. hCG is a member of a family of glycoprotein hormones including pituitary hormones lutropin (luteinizing hormone,LH), follitropin (follicle-stimulating hormone, FSH) and thyrotropin (thyroid-stimulating hormone, TSH). Members of this family are all composed of disulfide-rich heterodimers with two dissimilar subunits namely alpha- and beta-subunits. The alpha subunit is common to all the members of the family within a given species. The beta subunits are distinct in each of the horomones and confer the receptor and biological specificity. hCG can be used as a tumor marker, as its beta subunit is secreted by some cancers including seminoma, choriocarcinoma, germ cell tumors, hydatidiform mole, teratoma with elements of choriocarcinoma and islet cell tumor.

Mouse Monoclonal Anti-Human
HepPar1-OCH1E5



Liver stained with Anti-HepPar1

Clone	:	OCH1E5
Isotype	:	Mouse IgG1/k
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Hepatocellular Ca, Liver

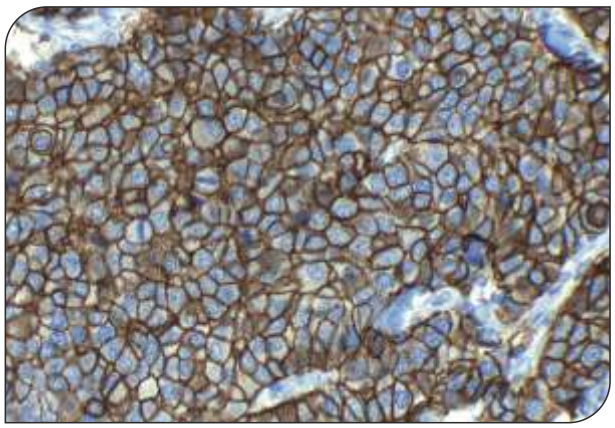
Catalog#	Catalog#	Catalog#
PM115-3ml (RTU)	PM115-6ml (RTU)	—
HAM115-3ml (RTU)	HAM115-6ml (RTU)	—
CM115-0.1ml (Conc)	CM115-0.5ml (Conc)	CM115-1ml (Conc)

E

Clone OCH1E5 is useful in studying hepatocellular tumors. It may be useful in differentiating clear cell hepatocellular carcinomas from other clear cell malignancies. It has been shown in the literature to be useful in differentiating hepatoblastoma of embryonal type from small round cell tumors of childhood. OCH1E5 labels an antigen in the mitochondrial fraction of the liver homogenates.

C • CITRATE BUFFER
TE • TRIS-EDTA BUFFER
E • EDTA BUFFER

Rabbit Monoclonal Anti-Human
HER2/ErbB2-EP3



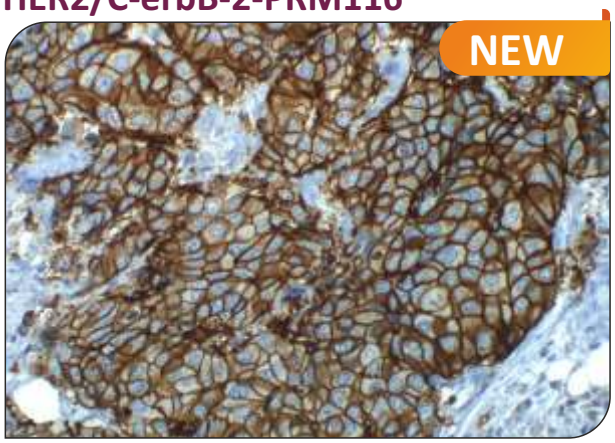
Breast Ca stained with Anti-HER2/ErbB2

Clone	:	EP3
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Membrane
Control	:	Breast Ca

Catalog#	Catalog#	Catalog#
PR047-3ml (RTU)	PR047-6ml (RTU)	—
HAR047-3ml (RTU)	HAR047-6ml (RTU)	—
CR047-0.1ml (Conc)	CR047-0.5ml (Conc)	CR047-1ml (Conc)

TE HER2 / ErbB2 is one of the four members of the ErbB receptor family of transmembrane receptor like tyrosine kinases. The kinase activity of ErbB2 can be activated without a ligand if it is over expressed and by association with other ErbB proteins. Overexpression of ErbB2 is detected in almost 40% of human breast cancers.

Rabbit Monoclonal Anti-Human
HER2/C-erbB-2-PRM116



Breast Ca stained with Anti-HER2/C-erbB-2

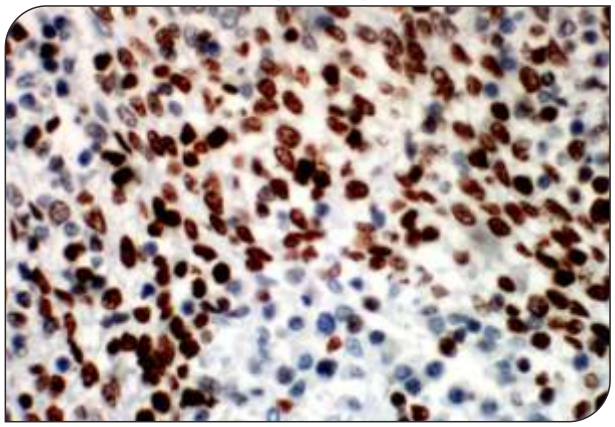
Clone	:	PRM116
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Membrane
Control	:	Breast Ca, Gastric Ca

Catalog#	Catalog#	Catalog#
PR317-3ml (RTU)	PR317-6ml (RTU)	—
HAR317-3ml (RTU)	HAR317-6ml (RTU)	—
CR317-0.1ml (Conc)	CR317-0.5ml (Conc)	CR317-1ml (Conc)

TE HER2 / ErbB2 is one of four members of the ErbB receptor family of transmembrane receptor-like tyrosine kinases. HER2 is overexpressed in 25–30% of all breast cancers, including primary as well as metastatic breast tumors. HER2 has been widely investigated as a prognostic indicator.

Rabbit Monoclonal Anti-Human

Histone H3 Phospho (pT3)-EP233



Tonsil stained with Anti-Histone H3 Phospho (pT3)

Clone	:	EP233
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Tonsil, Breast Ca

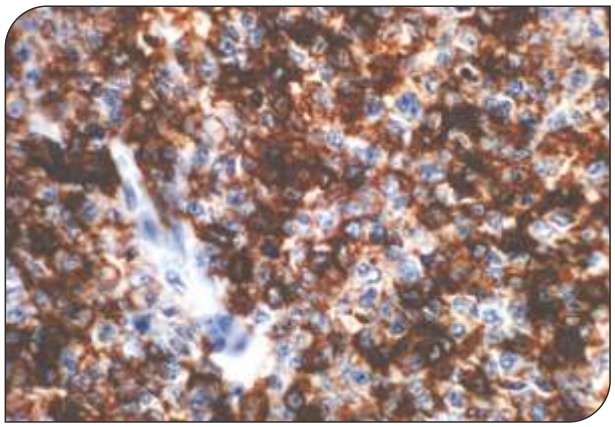
Catalog#	Catalog#	Catalog#
PR237-3ml (RTU)	PR237-6ml (RTU)	—
CR237-0.1ml (Conc)	CR237-0.5ml (Conc)	CR237-1ml (Conc)

TE

Histone H3 is a core histone protein, which complexes with the other histones to form the major constituents of chromatin in eukaryotic cells. In mammalian cells, phosphorylation of Threonine 3 residue in histone H3 reaches a maximum for condensation during mitosis. Phosphorylation of histone H3 (pHH3) occurs only during late G2 phase and mitosis. pHH3 is a marker for mitoses in various types of tumors. It is particularly useful in identifying mitotic figures in tumors with dense cellularity, limited mitotic activity, and/or abundant apoptotic, pyknotic or distorted nuclei.

Rabbit Monoclonal Anti-Human

HLA DRB1-EP191



Tonsil stained with Anti-HLA-DRB1

Clone	:	EP191
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm or Membrane
Control	:	Tonsil, Placenta

Catalog#	Catalog#	Catalog#
PR250-3ml (RTU)	PR250-6ml (RTU)	—
HAR250-3ml (RTU)	HAR250-6ml (RTU)	—
CR250-0.1ml (Conc)	CR250-0.5ml (Conc)	CR250-1ml (Conc)

TE

HLA-DRB1 belongs to the HLA class II beta chain paralogs. Known as MHC class II antigen DRB1*15. The class II molecule is a heterodimer consisting of an alpha (DRA) and a beta chain (DRB), both anchored in the membrane. It plays a central role in the immune system by presenting peptides derived from extracellular proteins. HLA-DRB1 is expressed mainly on antigen presenting cells, such as B-lymphocytes, monocytes and dendritic cells but can also be detected on activated T-lymphocytes and activated granulocytes. In abnormal tissues, it has been found in different types of acute lymphoblastic leukaemias and acute myeloid leukaemias. Additionally, HLADR was also found in some non-hematopoietic tumors, including carcinomas of the colon and breast.

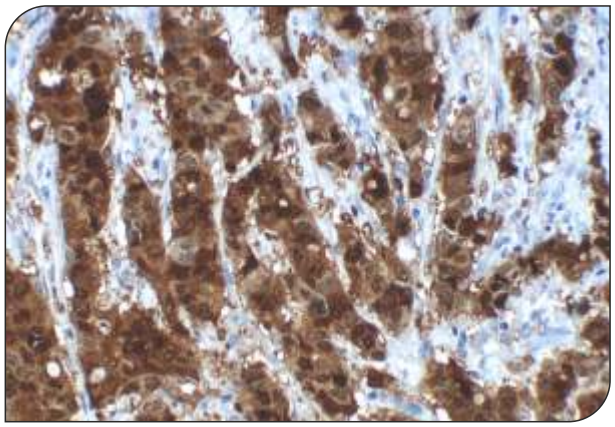
E -EDTA BUFFER

TE -TRIS-EDTA BUFFER

C -CITRATE BUFFER

Rabbit Monoclonal Anti-Human

HSP70-EP377



Brain Ca stained with Anti HSP70

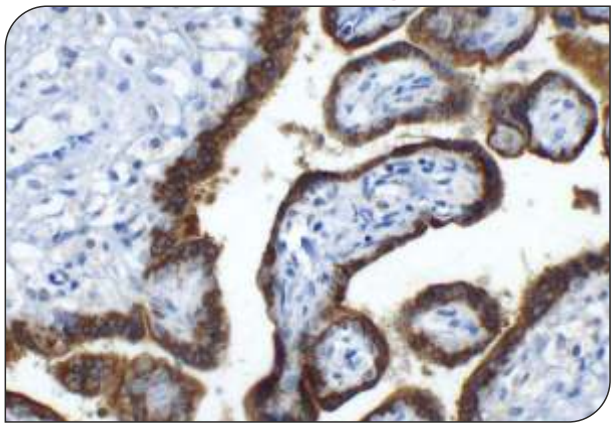
Clone	:	EP377
Isotype	:	Rabbit IgG1
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Breast Ca, HCC, Brain Ca

Catalog#	Catalog#	Catalog#
PR277-3ml (RTU)	PR277-6ml (RTU)	—
HAR277-3ml (RTU)	HAR277-6ml (RTU)	—
CR277-0.1ml (Conc)	CR277-0.5ml (Conc)	CR277-1ml (Conc)

TE The heat shock proteins (HSPs) are a conserved family of ubiquitously expressed proteins that functions to protect cells from various environmental damage. Two proteins within the family, HSP70 and HSP27 demonstrate strong anti-apoptotic activity; its over expression allow cells to survive in various conditions. HSPs have been implicated in tumorigenesis affecting cell cycle regulation, multi drug resistance and modulating p53 function. HSP70 has been studied in a variety of malignancies, including breast, lung, oral, prostate and uterine cervical cancers. A majority of results associated HSP70 over expression with poor prognosis and resistance to therapy. Recently, HSP70 diagnostic utility was established in identifying hepatocellular carcinoma (HCC). Its sensitivity and specificity were determined as 74% and 98%, respectively. Furthermore, a three antibody panel with HSP70, Glypican3 and Glutamine Synthetase is capable of distinguishing HCC from high grade dysplastic nodules with 100% specificity when 2 markers are positive.

Rabbit Monoclonal Anti-Human

Human Placental Lactogen-EP241



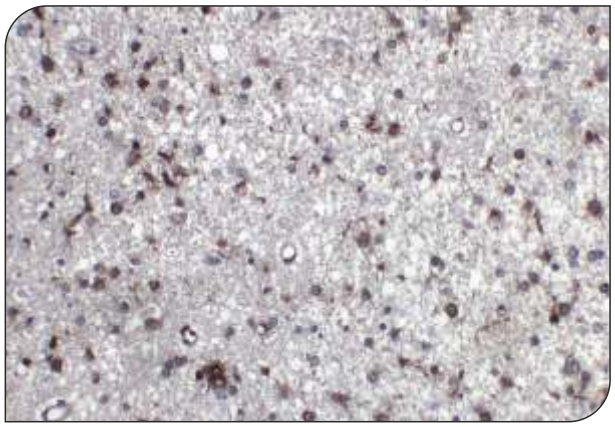
Placenta stained with Anti-HPL

Clone	:	EP241
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Placenta

Catalog#	Catalog#	Catalog#
PR140-3ml (RTU)	PR140-6ml (RTU)	—
HAR140-3ml (RTU)	HAR140-6ml (RTU)	—
CR140-0.1ml (Conc)	CR140-0.5ml (Conc)	CR140-1ml (Conc)

TE Human placental lactogen (also called CSH1 or HPL), is a member of the human growth hormone (hGH) / human placental lactogen gene family. It is important in the regulation of maternal and fetal metabolism, as well as the growth and development of the fetus. HPL is a secreted by the syncytiotrophoblast during pregnancy. Antibody to HPL reacts with syncytiotrophoblastic cells in choriocarcinoma and intermediate trophoblasts in trophoblastic tumors. It is a useful marker for tumors with trophoblast differentiation.

Mouse Monoclonal Anti-Human
IDH1-IDH1/1152 (Wild Type)



Glioma stained with Anti-IDH1

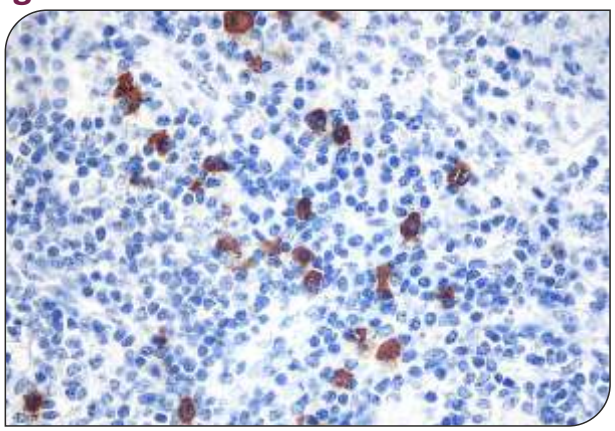
Clone	:	IDH1/1152 (WildType)
Isotype	:	Mouse IgG1k
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm and Nucleus
Control	:	Astrocytoma, Breast Ca, Prostate Ca Glioma

Catalog#	Catalog#	Catalog#
PM209-3ml (RTU)	PM209-6ml (RTU)	—
HAM209-3ml (RTU)	HAM209-6ml (RTU)	—
CM209-0.1ml (Conc)	CM209-0.5ml (Conc)	CM209-1ml (Conc)

TE

It recognizes a 45kDa protein, which is identified as isocitrate dehydrogenase (IDH1). It belongs to the isocitrate and isopropylmalate dehydrogenases family. IDH1 catalyzes the third step of the citric acid cycle, which involves the oxidative decarboxylation of isocitrate, forming Aa ±-ketoglutarate and CO2 in a two step reaction. The first step involves the oxidation of isocitrate to the intermediate oxalosuccinate, while the second step involves the production of Aa ±-ketoglutarate. During this process, either NADH or NADPH is produced along with CO2. Recently, an inactivating mutation of IDH1 has been implicated in glioblastoma. IDH1 appears to function as a tumor suppressor that, when mutationally inactivated, contributes to tumorigenesis in part through induction of the HIF-1 pathway.

Rabbit Monoclonal Anti-Human
IgG4-EP138



Lymph Node stained with Anti-IgG4

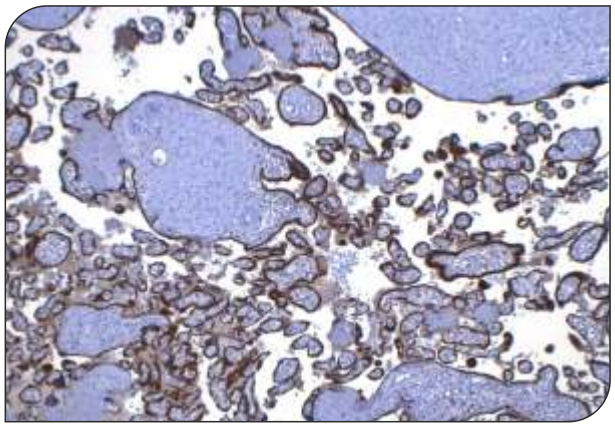
Clone	:	EP138
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Tonsil, Lymph Node

Catalog#	Catalog#	Catalog#
PR212-3ml (RTU)	PR212-6ml (RTU)	—
HAR212-3ml (RTU)	HAR212-6ml (RTU)	—
CR212-0.1ml (Conc)	CR212-0.5ml (Conc)	CR212-1ml (Conc)

TE

Human IgG4, one of four subclasses of IgG, contains a gamma 4 heavy chain and a hinge region that is shorter than that of IgG1. No allotypes have been detected on the heavy chains of IgG4. Its two primary effector functions are activating complements and binding to the FcgR of effector cells to initiate phagocytosis. Human IgG4 accounts for less than 6% of the total IgG serum level. Recent studies show that serum levels and immunohistochemistry staining with IgG4 antibody is a useful diagnosis marker for IgG4 related sclerosing diseases. A new concept of IgG4 related systemic disease (ISD) has been established recently. The ISD is characterized by elevated serum IgG4 levels and extensive IgG4+ plasma cell infiltrate in pancreas and/or in other organs, including peripancreatic tissue, bile duct, gallbladder, portal area of the liver, gastric mucosa, colonic mucosa, salivary glands, lymph nodes, and bone marrow. Immunohistochemistry analysis of IgG4 is useful for identifying ISD.

Rabbit Monoclonal Anti-Human
IMP3-EP286



Placenta stained with Anti-IMP3

Clone	:	EP286
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm and/or Nucleus
Control	:	Fetal Liver, Esophageal Ca, Lung SCC, Placenta

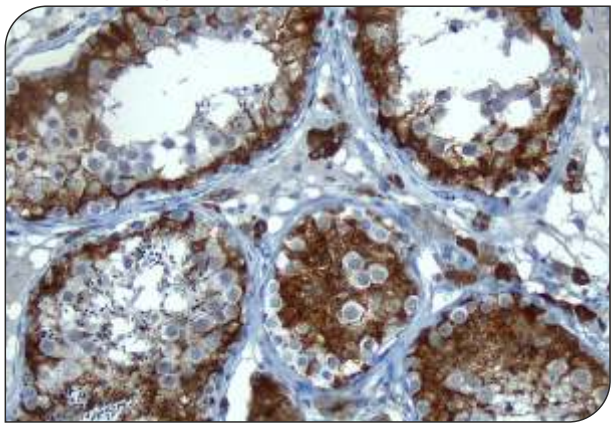
Catalog#	Catalog#	Catalog#
PR221-3ml (RTU)	PR221-6ml (RTU)	—
HAR221-3ml (RTU)	HAR221-6ml (RTU)	—
CR221-0.1ml (Conc)	CR221-0.5ml (Conc)	CR221-1ml (Conc)

TE

IMP3, known as Insulin like growth factor 2 (IGF-II) mRNA binding protein 3, is an oncofetal protein that stabilizes IGF-II mRNA for trafficking and plays an important role in cell growth and migration. This 65-70 kDa protein is expressed normally in developing tissues during early embryogenesis in a variety of fetal tissues including the liver, lung kidney, thymus, and placenta, but at low or undetectable levels in normal adult tissues. Recent studies have demonstrated IMP3 expression in various malignant tumors of the lung, gastrointestinal tract, liver, endometrium and bladder, while undetectable in adjacent benign tissues. IMP3 may have a critical role in tumor proliferation, invasion and metastasis, and has been suggested to be an independent marker for poor prognosis in patients with clear cell carcinomas.

Mouse Monoclonal Anti-Human
Inhibin Alpha-R1

E TE



Testis stained with Anti-Inhibin Alpha

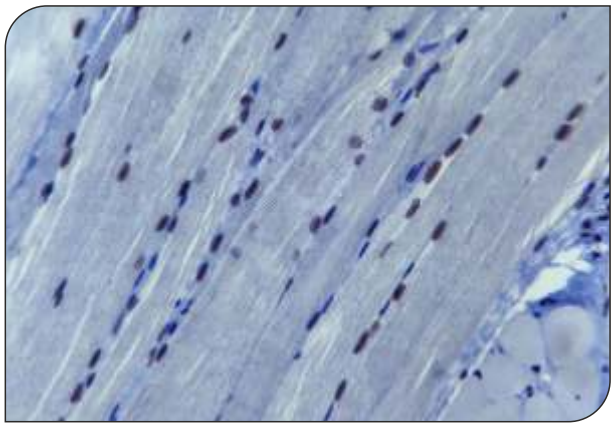
Clone	:	R1
Isotype	:	Mouse IgG2a
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Testis, Granulosa Cell Tumor

Catalog#	Catalog#	Catalog#
PM122-3ml (RTU)	PM122-6ml (RTU)	—
HAM122-3ml (RTU)	HAM122-6ml (RTU)	—
CM122-0.1ml (Conc)	CM122-0.5ml (Conc)	CM122-1ml (Conc)

Inhibin is a dimeric glycoprotein hormone comprised of an a and b subunit. It is a member of the transforming growth factor-ß (TGF-ß) superfamily and inhibits the production or secretion of pituitary gonadotropins, preferentially follicle stimulating hormone (FSH). Inhibin with activin, a closely related dimeric glycoprotein hormone comprised of two ß-subunits, create a fine tuned endocrine feedback loop. Inhibin decreases, while activin increases, the biosynthesis and release of FSH. Inhibin and activin have been demonstrated to be present in a variety of gonadal and non-gonadal tissues, indicating that these peptides have other functions in addition to regulating FSH secretion. Inhibin antagonizes the action of activin in many systems, which may be a property valid in tumorigenesis. It is also thought that inhibin may act as a gonadal tumor suppressor, while activin may promote tumor growth via an autocrine loop. Inhibin alpha is expressed in a range of tissues including the endometrium, brain, adrenal gland, testis and ovary.

The antibody may be of value in the differentiation of adrenocortical tumors, placental and gestational trophoblastic lesions, and sex cord stromal tumors.

Mouse Monoclonal Anti-Human
INI-1-25



Skeletal Muscle stained with Anti-INI-1

Clone	:	25
Isotype	:	Mouse IgG2a
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Wilms Tumor, Rhabdoid Tumor, Brain, Astrocytoma, Skeletal Muscle

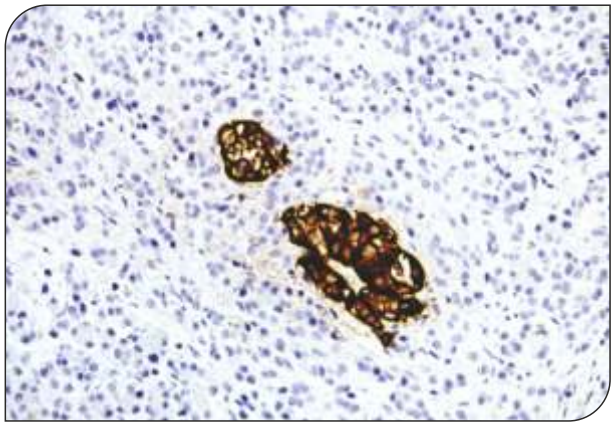
Catalog#	Catalog#	Catalog#
PM202-3ml (RTU)	PM202-6ml (RTU)	—
HAM202-3ml (RTU)	HAM202-6ml (RTU)	—
CM202-0.1ml (Conc)	CM202-0.5ml (Conc)	CM202-1ml (Conc)

E TE

The INI1 gene, which encodes a functionally uncharacterized protein component of the hSWI/SNF chromatin remodeling complex, is often mutated or deleted in malignant rhabdoid tumor (MRT). Two isoforms of INI1, that differ by the variable inclusion of amino acids, potentially are produced by differential RNA splicing. The morphology of MRTs can present challenges in differential diagnosis.

The overall survival of MRTs relative to its potential mimics medulloblastoma, supratenorial primitive neuroectodermal tumors (sPNETs)) is quite low, and thus differentiation from these other tumors is desirable. Lack of nuclear labeling by anti-INI1 is characteristic of MRT. The majority of medulloblastomas and sPNETs are labeled by anti-INI1. MRTs also originate from the kidney and soft tissues.

Rabbit Monoclonal Anti-Human
Insulin-EP125



Pancreas stained with Anti-Insulin

Clone	:	EP125
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Pancreas

Catalog#	Catalog#	Catalog#
PR048-3ml (RTU)	PR048-6ml (RTU)	—
HAR048-3ml (RTU)	HAR048-6ml (RTU)	—
CR048-0.1ml (Conc)	CR048-0.5ml (Conc)	CR048-1ml (Conc)

C

Insulin is a hormone that regulates glucose homeostasis. It increases cell permeability to monosaccharides, amino acids and fatty acids, and it accelerates glycolysis, the pentose phosphate cycle, and glycogen synthesis in liver. It is synthesized in the beta cell of the pancreas. The antibody labels both normal and neoplastic insulin producing cells. It is useful in identifying insulinoma.

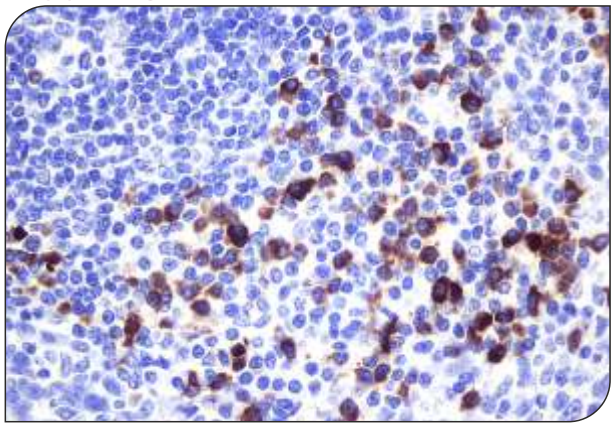
E -EDTA BUFFER

TE -TRIS-EDTA BUFFER

C -CITRATE BUFFER

Rabbit Monoclonal Anti-Human

Kappa Light Chain-EP171



Tonsil stained with Anti-Kappa Light Chain

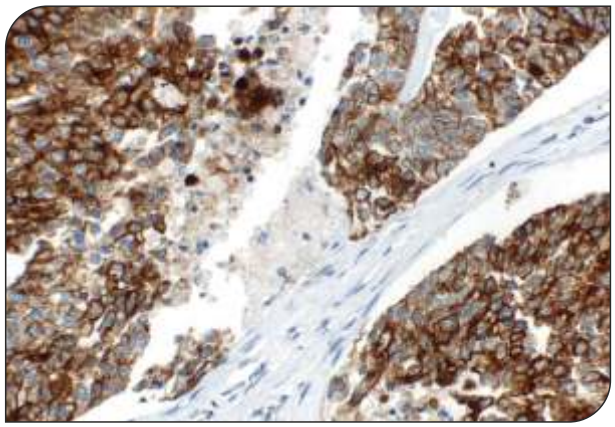
Clone	:	EP171
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Membrane or Cytoplasm
Control	:	Tonsil, B-Cell Lymphoma

Catalog#	Catalog#	Catalog#
PR049-3ml (RTU)	PR049-6ml (RTU)	—
HAR049-3ml (RTU)	HAR049-6ml (RTU)	—
CR049-0.1ml (Conc)	CR049-0.5ml (Conc)	CR049-1ml (Conc)

TE Each immunoglobulin molecule consists of two identical heavy chains and two identical light chains. There are two types of light chains designated as kappa and lambda. The kappa light chain antibody labels kappa light chain expressing B-lymphocytes and plasma cells. Other cells may also express kappa light chain due to non-specific uptake of immunoglobulin. Individual B-cells express either kappa or lambda light chains. Monoclonality is generally assumed to be evidence of a malignant proliferation. The pairing of an anti-lambda with a kappa light chain antibody is useful for identifying monoclonality of lymphoid malignancies.

Mouse Monoclonal Anti-Human

Keratin-CAM 5.2



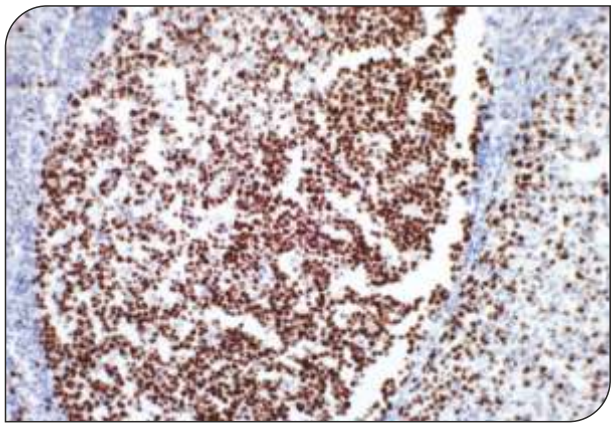
Poorly Differentiated Ca Stained with Anti-Keratin

Clone	:	CAM5.2
Isotype	:	Mouse IgG2a/k
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Breast, Poorly Differentiated Ca Ovarian Ca

Catalog#	Catalog#	Catalog#
PM200-3ml (RTU)	PM200-6ml (RTU)	—

TE Anti-Cytokeratin (CAM 5.2) reagent has a primary reactivity with human keratin proteins that correspond to Moll's peptides #7 and #8, Mr 48 and 52 kDa, respectively. Cytokeratin 7 and 8 are present on secretory epithelia of normal human tissue but not on stratified squamous epithelium. Anti-Cytokeratin (CAM 5.2) stains most epithelial derived tissue, including liver, renal tubular epithelium and hepatocellular and renal cell carcinomas. Anti-Cytokeratin (CAM 5.2) may not react with some squamous cell carcinomas.

Mouse Monoclonal Anti-Human
Ki67-GM010



Tonsil stained with Anti-Ki67

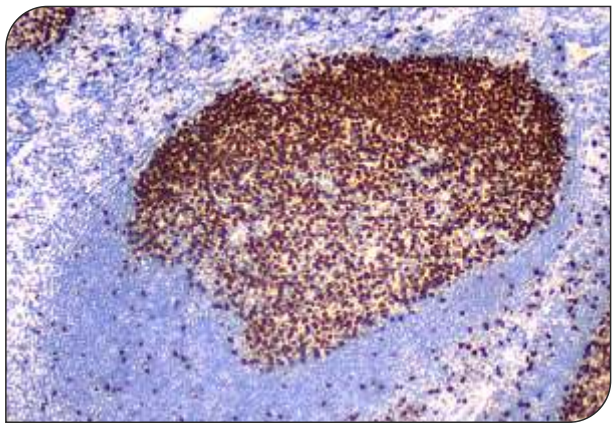
Clone	:	GM010
Isotype	:	Mouse IgG1
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Tonsil, Breast Ca

Catalog#	Catalog#	Catalog#
PM096-3ml (RTU)	PM096-6ml (RTU)	—
HAM096-3ml (RTU)	HAM096-6ml (RTU)	—
CM096-0.1ml (Conc)	CM096-0.5ml (Conc)	CM096-1ml (Conc)

TE

The antibody labels Ki67 (Clone GM010 also known as GM001), a proliferation associated nuclear protein expressed during all active phases of the cell cycle. Quantitative determination of the fraction of cells, which stain positive for the Ki67 nuclear antigen, has been demonstrated to be a highly accurate way of assessing the fraction of proliferating cells within a given tissue. Estimation of the cell proliferation index in tumor cells is valuable as a prognostic indicator.

Mouse Monoclonal Anti-Human
Ki67-MIB-1



Tonsil stained with Anti-Ki67

Clone	:	MIB1
Isotype	:	Mouse IgG1/k
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Tonsil, Breast Ca

Catalog#	Catalog#	Catalog#
PM210-3ml (RTU)	PM210-6ml (RTU)	—
HAM210-3ml (RTU)	HAM210-6ml (RTU)	—
CM210-0.1ml (Conc)	CM210-0.5ml (Conc)	CM210-1ml (Conc)

TE

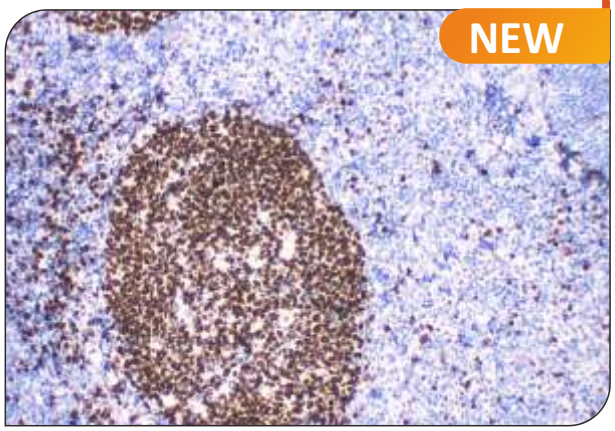
The Ki67 protein is a nuclear protein doublet, 345-395 kDa, playing a pivotal role in maintaining cell proliferation. In diagnostic histopathology and cell biology, the antibody has proven valuable for the demonstration of the Ki67 antigen in normal and neoplastic cells, for example in soft tissue sarcoma, prostatic adenocarcinoma and breast carcinoma. The Ki67 has been confirmed as a very powerful single prognostic factor for overall survival, with highly proliferative cases showing a much poorer outcome than tumors with low proliferation. In breast cancer, the proliferative index measured by Ki67 immunoreactivity has both prognostic and predictive value.

E -EDTA BUFFER

TE -TRIS-EDTA BUFFER

C -CITRATE BUFFER

Rabbit Monoclonal Anti-Human
Ki67-PRM113



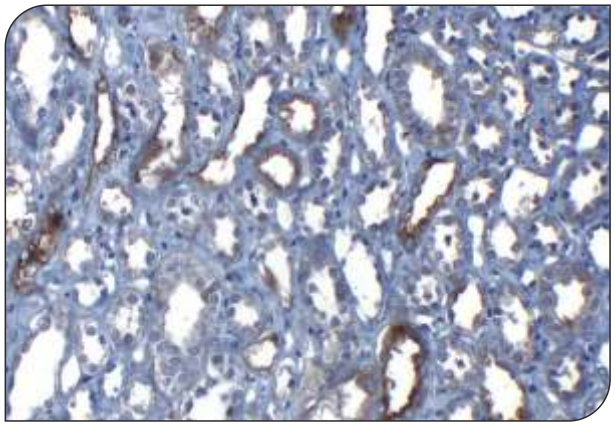
Tonsil stained with Anti-Ki67

Clone	:	PRM113
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Tonsil, Lymph Node

Catalog#	Catalog#	Catalog#
PR314-3ml (RTU)	PR314-6ml (RTU)	—
HAR314-3ml (RTU)	HAR314-6ml (RTU)	—
CR314-0.1ml (Conc)	CR314-0.5ml (Conc)	CR314-1ml (Conc)

TE The Ki67 protein is a cellular marker for proliferation. It is strictly associated with cell proliferation. During the interphase, the Ki67 antigen can be exclusively detected within the cell nucleus, whereas in mitosis most of the protein is relocated to the surface of the chromosomes. Ki67 protein is present during all active phases of the cell cycle (G1, S, G2, and mitosis), but is absent from resting cells (G0). The Ki67 antibody is an excellent marker to determine the growth fraction of a given cell population. The fraction of Ki67 positive tumor cells (the Ki-67 labelling index) is often correlated with the clinical course of cancer. The best-studied examples in this context are carcinomas of the prostate and the breast.

Rabbit Monoclonal Anti-Human
KIM-1(HAVCr-1)-EP309



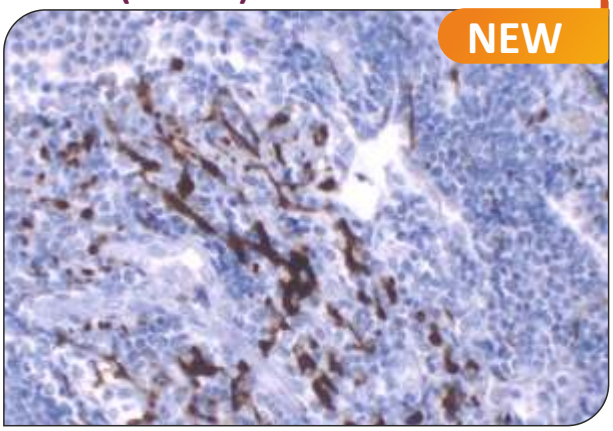
Kidney stained with Anti-KIM-1(HAVCr-1)

Clone	:	EP309
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Kidney, RCC

Catalog#	Catalog#	Catalog#
PR258-3ml (RTU)	PR258-6ml (RTU)	—
HAR258-3ml (RTU)	HAR258-6ml (RTU)	—
CR258-0.1ml (Conc)	CR258-0.5ml (Conc)	CR258-1ml (Conc)

TE KIM-1 (kidney injury molecule 1), also known as HAVcr-1 (Hepatitis A virus cellular receptor 1), is a transmembrane glycoprotein that contributes to immune modulation, allergic response and viral disease susceptibility. KIM-1 has wide tissue distribution, and is localized on the apical membrane. While KIM-1 protein expression is generally undetectable in the normal kidney, high levels were observed in the proximal tubules in the post ischemic kidney, suggesting its utility as a dedifferentiation marker for early indication of epithelial response to injury. A considerable number of studies demonstrated KIM-1 mRNA and protein regulation following acute nephrotoxicity. Consequently, this biomarker was qualified by the FDA as an acceptable biomarker in detecting acute drug induced nephrotoxicity in rats during preclinical drug development. KIM-1 has also been extensively evaluated in renal cell carcinoma (RCC) tissues. Overexpression of KIM-1 was observed in over 90% of clear cell RCC and 82% of primary RCC. Compared to normal kidney, expression is reduced in benign oncocytomas. Additionally, KIM-1 was also detected in lymph nodes to which tumors have metastasized. These observations are consistent with the interpretation that clear cell and papillary RCC are derived from proximal tubular cells while oncocytomas are of the distal nephron. Recently, KIM-1 was also found overexpressed in ovarian clear cell carcinoma and colorectal cancer.

Rabbit Monoclonal Anti-Human
L1CAM(CD171)-EP411



Appendix stained with Anti-L1CAM(CD171)

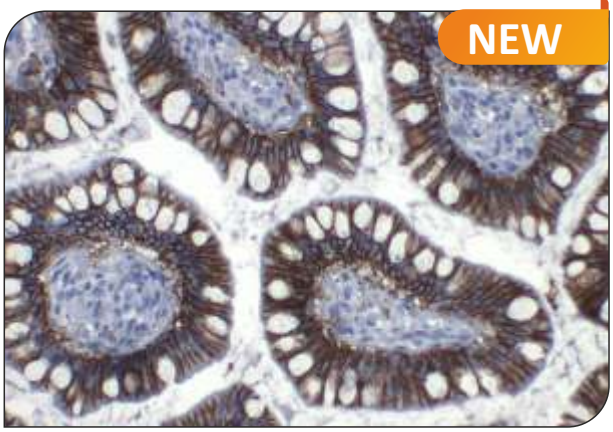
Clone	:	EP411
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm and Membrane
Control	:	Appendix, Tonsil, Kidney, Gastric Ca

Catalog#	Catalog#	Catalog#
PR357-3ml (RTU)	PR357-6ml (RTU)	—
HAR357-3ml (RTU)	HAR357-6ml (RTU)	—
CR357-0.1ml (Conc)	CR357-0.5ml (Conc)	CR357-1ml (Conc)

E

The L1 Cell Adhesion Molecule (L1CAM), also known as CD171, is a transmembrane glycoprotein protein crucial for neurogenesis and plays an essential role in neural cell adhesion and migration. Mutations in the X-linked L1CAM result in MASA syndrome; a neurological disorder causing mental retardation, aphasia, shuffling gait, and adducted thumbs. In addition to the brain, L1CAM expression is normally expressed in kidney tubular epithelium, intestinal crypt, and peripheral nerves. L1CAM has been investigated in various tumors, including colorectal, renal cell, ovarian, and thyroid carcinomas. Cytoplasmic and membrane expression of L1CAM were significantly correlated with poor clinical outcome, defined with aggressive tumor progression, invasion, and unfavorable prognosis. Mechanistic studies demonstrated the role of L1CAM in promoting cell proliferation and migration, conferring chemo-resistance and activation of the PI3K/Akt signaling pathway. In a large-scale evaluation of over a thousand early-stage endometrial cancers, 51% of L1CAM-positive tumors experienced recurrence versus 3% of L1CAM-negative tumors. Zeimet and colleagues recommended routine immunohistochemical L1CAM determination for all type I endometrial cancers due to its superiority over classical risk assessment, histopathological grading and FIGO stage I subdivision in predicting clinical outcome.

Rabbit Monoclonal Anti-Human
LI-Cadherin-EP86



Small Intestine stained with Anti-LI-Cadherin

Clone	:	EP86
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Membrane
Control	:	Small Intestine, Appendix, Colon, Colon Adeno Ca

Catalog#	Catalog#	Catalog#
PR359-3ml (RTU)	PR359-6ml (RTU)	—
HAR359-3ml (RTU)	HAR359-6ml (RTU)	—
CR359-0.1ml (Conc)	CR359-0.5ml (Conc)	CR359-1ml (Conc)

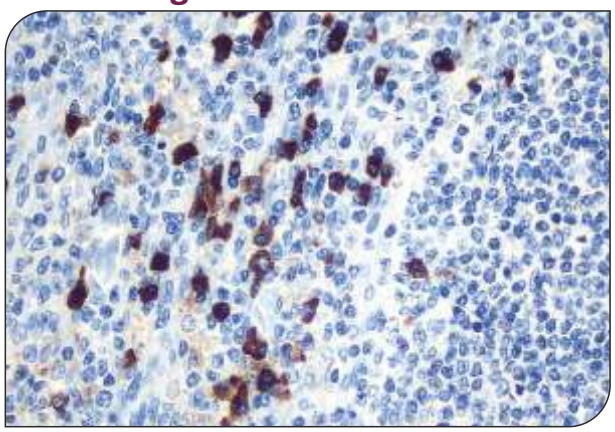
TE

LI-Cadherin, also known as Cadherin-17, is part of the cadherin superfamily and is a calcium-dependent, membrane-associated glycoprotein. Cadherins are responsible for mediating cell-cell adhesion and are important for the structural integrity of epithelia. LI-Cadherin consists of an extracellular region containing 7 cadherin domains, and a transmembrane region but lacking the conserved cytoplasmic domain. It is a component of the gastrointestinal tract and pancreatic ducts, acting as an intestinal proton-dependent peptide transporter in the first step in oral absorption of many medically important peptide-based drugs. It may play a role in the morphological organization of liver and intestine.

In normal tissues, the LI-Cadherin antibody labels epithelial cells in the gastrointestinal tract and pancreatic duct, but not in kidney, liver and other tissues. In tumors, LI-Cadherin is expressed on adenocarcinoma of the digestive system, including liver cancer. It is a sensitve marker for the identification of gastric intestinal metaplasia and well differentiated adenocarcinomas.

Rabbit Monoclonal Anti-Human

Lambda Light Chain-EP172



Tonsil stained with Anti-Lambda Light Chain

Clone	:	EP172
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Membrane or Cytoplasm
Control	:	Tonsil, B-Cell Lymphoma

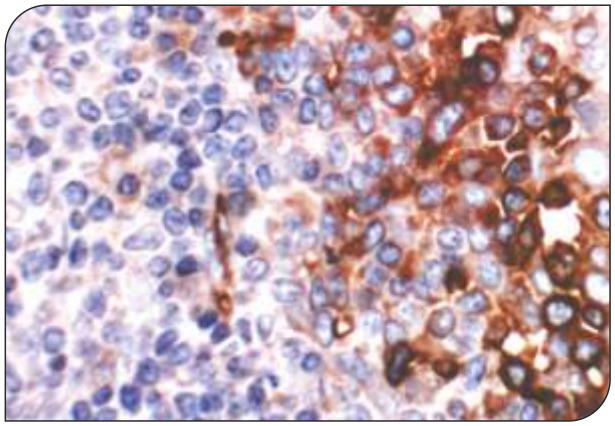
Catalog#	Catalog#	Catalog#
PR050-3ml (RTU)	PR050-6ml (RTU)	—
HAR050-3ml (RTU)	HAR050-6ml (RTU)	—
CR050-0.1ml (Conc)	CR050-0.5ml (Conc)	CR050-1ml (Conc)

TE

Each immunoglobulin molecule consists of two identical heavy chains and two identical light chains. There are two types of light chains designated as kappa and lambda. The gene rearrangement process that generates the immunoglobulin molecule results in either a productive kappa or lambda gene. The lambda light chain antibody labels the lambda light chain that expresses normal and neoplastic B-lymphocytes and plasma cells. Other cells may also express lambda light chain due to nonspecific uptake of immunoglobulin. Individual B-cells express either kappa or lambda light chains. Monoclonality is generally assumed to be evidence of a malignant proliferation. The pairing of a kappa with a lambda light chain antibody is useful for identifying monoclonality of lymphoid malignancies.

Rabbit Polyclonal Anti-Human

Laminin-Polyclonal



Tonsil stained with Anti-Laminin

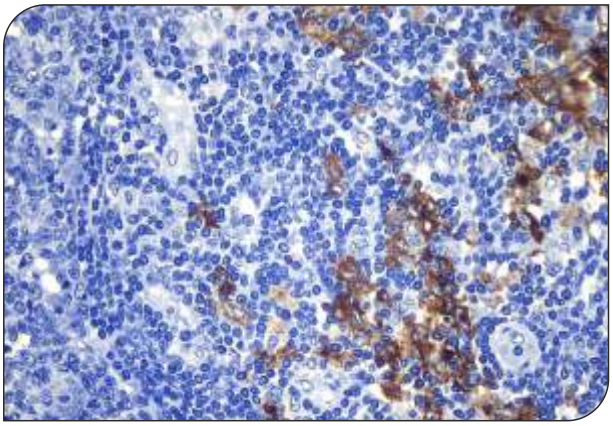
Clone	:	Polyclonal
Isotype	:	NA
Reactivity	:	Human, FFPE
Localization	:	Membrane
Control	:	Tonsil

Catalog#	Catalog#	Catalog#
PP243-3ml (RTU)	PP243-6ml (RTU)	—
HAP243-3ml (RTU)	HAP243-6ml (RTU)	—
CP243-0.1ml (Conc)	CP243-0.5ml (Conc)	CP243-1ml (Conc)

TE

This antibody labels Laminin, which is present in the basement membrane. The antibody may be useful in the characterization of basement membrane preservation, eg. in breast cancer and adenocarcinomas of the lung. Laminins have been found to promote cell adhesion, migration, protease activity, proliferation, tumor growth, angiogenesis and metastasis.

Rabbit Monoclonal Anti-Human
Langerin(CD207)-EP349



Lymph Node stained with Anti-Langerin

Clone	:	EP349
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Membrane
Control	:	Lymph nNode, Skin, Langerhans Cells, Histiocytosis, Tonsil, Thymus

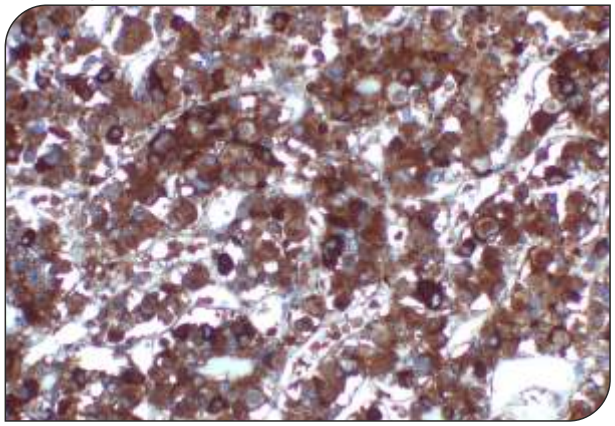
Catalog#	Catalog#	Catalog#
PR275-3ml (RTU)	PR275-6ml (RTU)	—
CR275-0.1ml (Conc)	CR275-0.5ml (Conc)	CR275-1ml (Conc)

TE

Langerin also known as CD207, is a type II transmembrane receptor expressed on Langerhans cells. Langerhans cells are immature dendritic cells localized in the epidermis and mucosal epithelia that initiate innate and adaptive immune responses to skin relevant antigens. Tumors derived from Langerhans cells are classified into Langerhans cells histiocytosis (LCH) and Langerhans cell sarcoma (LCS).

LCS is a rare dendritic cell tumor defined as a malignant high grade variant of LCH. Differentiation between LCH, LCS and other tumors is difficult. The presence of Birbeck granules, CD1a and Langerin protein expression provides utility in differentiating Langerhans cell disorders from other non-Langerhans cell proliferations.

Mouse Monoclonal Anti-Human
LH Alpha-LHa/756



Pituitary gland stained with Anti-LH Alpha

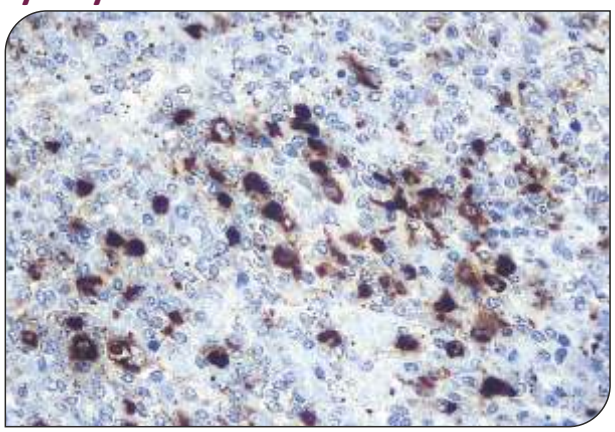
Clone	:	LHa/756
Isotype	:	Mouse IgG1,k
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Pituitary

Catalog#	Catalog#	Catalog#
PM217-3ml (RTU)	PM217-6ml (RTU)	—
HAM217-3ml (RTU)	HAM217-6ml (RTU)	—
CM217-0.1ml (Conc)	CM217-0.5ml (Conc)	CM217-1ml (Conc)

TE

This MAb reacts with a protein of ~13kDa, identified as alpha sub unit of Luteinizing Hormone (LH). Its structure is similar to the other glycoproteins, follicle stimulating hormone (FSH), thyroid stimulating hormone (TSH), and human chorionic gonadotropin (hCG). The protein dimer contains 2 polypeptide units, labeled alpha and beta subunits that are connected by two bridges. The alpha subunits of LH, FSH, TSH, and hCG are identical, and contain 92 amino acids. The beta subunits vary. LH has a beta subunit of 121 amino acids (LHB) that confers its specific biologic action and is responsible for interaction with the LH receptor. This beta subunit contains the same amino acids in sequence as the beta subunit of hCG and both stimulate the same receptor; however, the hCG beta subunit contains an additional 24 amino acids and the hormones differ in the composition of their sugar moieties. In the female, an acute rise of LH levels triggers ovulation. In the male, where LH has also been called Interstitial Cell Stimulating Hormone (ICSH), it stimulates Leydig cell production of testosterone. LH is a useful marker in classification of pituitary tumors and the study of pituitary disease.

Rabbit Monoclonal Anti-Human
Lysozyme-EP134



Spleen stained with Anti-Lysozyme

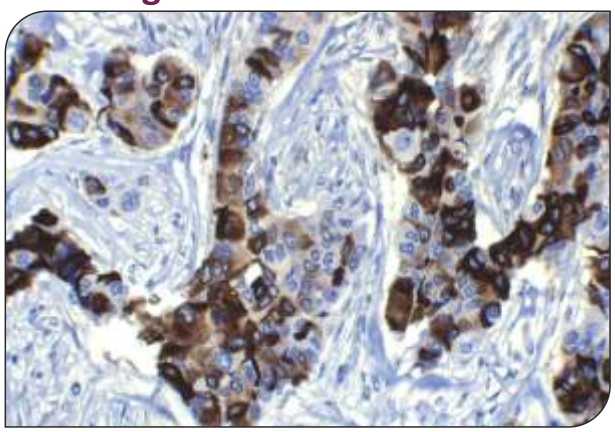
Clone	:	EP134
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Spleen, Histiocytic Tumor, Tonsil

Catalog#	Catalog#	Catalog#
PR170-3ml (RTU)	PR170-6ml (RTU)	—
HAR170-3ml (RTU)	HAR170-6ml (RTU)	—
CR170-0.1ml (Conc)	CR170-0.5ml (Conc)	CR170-1ml (Conc)

TE

Lysozyme is a ubiquitous enzyme defined as muraminidase catalyzing the hydrolysis of the beta glycosidic bond in bacterial peptidoglycan, a major component of the bacterial cell wall. Lysozyme in tissues and body fluids is associated with the monocyte macrophage system and enhances the activity of immunoagents. Lysozyme immunoreactivity has been found in myeloid cells, histiocytes, granulocytes, macrophages, and monocytes. It is a good marker for macrophages that are activated in phagocytosis. Lysozyme has been useful in the identification of hitiocytoma.

Rabbit Monoclonal Anti-Human
Mammaglobin-EP249



Breast Ca stained with Anti-Mammaglobin

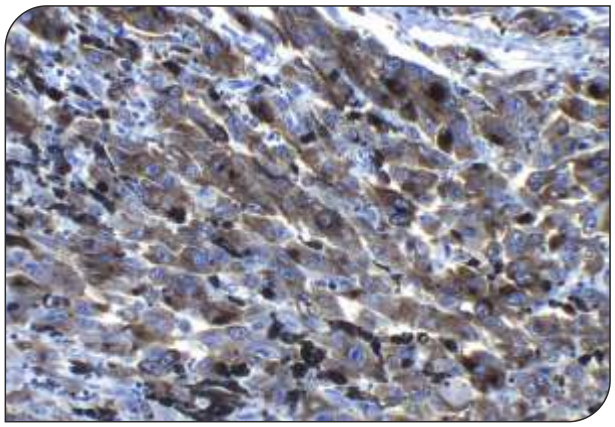
Clone	:	EP249
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Breast Ca, Breast

Catalog#	Catalog#	Catalog#
PR051-3ml (RTU)	PR051-6ml (RTU)	—
HAR051-3ml (RTU)	HAR051-6ml (RTU)	—
CR051-0.1ml (Conc)	CR051-0.5ml (Conc)	CR051-1ml (Conc)

C

The mammaglobin gene encodes a 10-kDa glycoprotein that is a homolog of the human Clara cell 10-kDa protein (CC10) uteroglobin SCGB2A2. Expression of the mammaglobin gene is highly restricted to the adult mammary gland. Antibody to Mammaglobin labels normal breast epithelial cells and breast tumor cells. It is a useful marker for identification of primary and metastatic breast cancer.

Rabbit Monoclonal Anti-Human
MART1-EP43



Melanoma stained with Anti-MART1

Clone	:	EP43
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Melanoma, Skin

Catalog#	Catalog#	Catalog#
PR052-3ml (RTU)	PR052-6ml (RTU)	—
HAR052-3ml (RTU)	HAR052-6ml (RTU)	—
CR052-0.1ml (Conc)	CR052-0.5ml (Conc)	CR052-1ml (Conc)

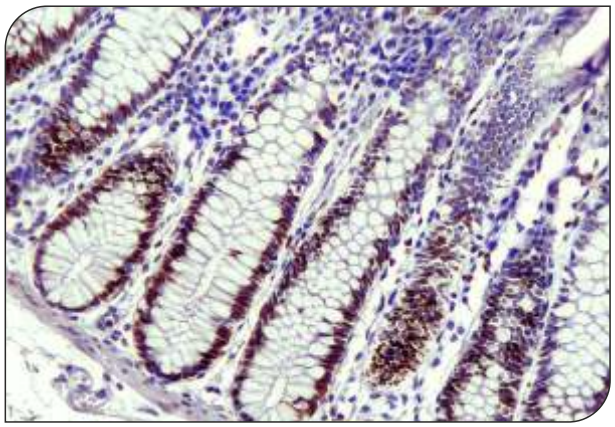
C

MART-1 (Melanoma antigen recognized by T-cells), also known as Melan-A, is a melanocyte lineage specific protein recognized by the T-lymphocytes of patients with established malignancy. MART-1 labels both normal melanocytes and diseased cells with melanocyte differentiation.

It is useful for diagnosis of tumors with melanocyte differentiation, especially metastatic melanoma. Identification of MART-1 also opens possibilities for the development of immunotherapies for patients with melanoma.

Rabbit Monoclonal Anti-Human
MCM2-EP40

E TE



Colon stained with Anti-MCM2

Clone	:	EP40
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Breast Ca, Colon Ca, Tonsil

Catalog#	Catalog#	Catalog#
PR053-3ml (RTU)	PR053-6ml (RTU)	—
HAR053-3ml (RTU)	HAR053-6ml (RTU)	—
CR053-0.1ml (Conc)	CR053-0.5ml (Conc)	CR053-1ml (Conc)

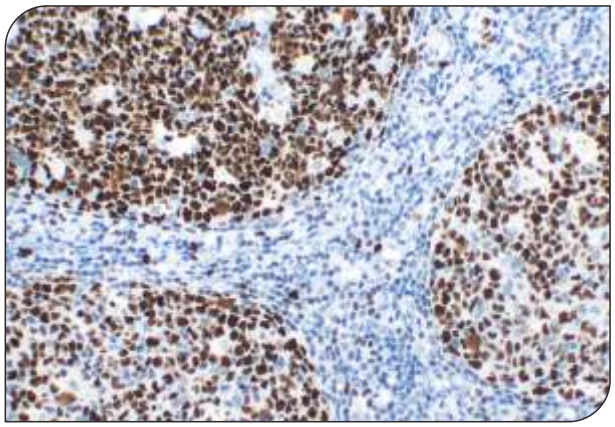
Minichromosome maintenance protein 2 (MCM2), also known as DNA replication licensing factor MCM2, is a member of the MCM family that regulates mammalian DNA replication. This family is composed of six related subunits, called the hexameric MCM2-7 complex, that are conserved in all eukaryotes. MCM2 acts as a factor to license DNA for one and only one round of replication per cell cycle. In the cell cycle, levels of the MCM family gradually increase in a variable manner from G0 into the G1/S phase. In the G0 stage, the amounts of MCM2 and MCM5 proteins are much lower than that of MCM7 and MCM3 proteins, so some of them participate in cell cycle regulation. MCM2 is localized in the nucleus throughout interphase. It is required for entry into the S- phase and cell division.

E -EDTA BUFFER

TE -TRIS-EDTA BUFFER

C -CITRATE BUFFER

Rabbit Monoclonal Anti-Human
MCM5-EP84



Tonsil stained with Anti-MCM5

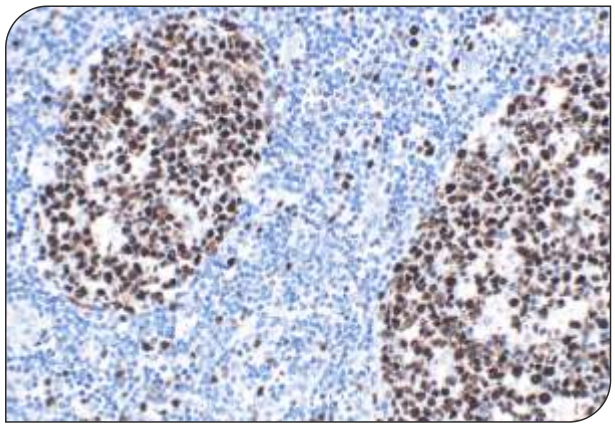
Clone	:	EP84
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Tonsil, Colon Ca

Catalog#	Catalog#	Catalog#
PR241-3ml (RTU)	PR241-6ml (RTU)	—
HAR241-3ml (RTU)	HAR241-6ml (RTU)	—
CR241-0.1ml (Conc)	CR241-0.5ml (Conc)	CR241-1ml (Conc)

TE

Minichromosome maintenance protein 5 (MCM5), also known as DNA replication licensing factor MCM5,is a member of the MCM family that regulates mammalian DNA replication. This family is composed of six related subunits, called the hexameric MCM2-7 complex, that are conserved in all eukaryotes. It functions as a replicative helicase, the molecular motor that both unwinds duplex DNA and powers fork progression during DNA replication. MCM proteins are also implicated in other chromosome transactions including damage response, transcription and chromatin structure. MCMs are central players in many aspects of genome stability. The MCM5 protein is upregulated in the transition from the G0 to G1/S phase of the cell cycle and may actively participate in cell cycle regulation. There is a strong positive correlation between MCM2 or MCM5 expression levels and Ki67 labeling index. MCM5 maybe auseful proliferation marker for skin cancer, colon cancer and is of prognostic value in colon cancer and ovarian cancer. In combination with p16INK4A expression and CDC6, MCM5 may aid in the detection of cervical dysplasia.

Rabbit Monoclonal Anti-Human
MCM6-EP375



Lymph Node stained with Anti-MCM6

Clone	:	EP375
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Colon, Colon Ca, Lymph Node

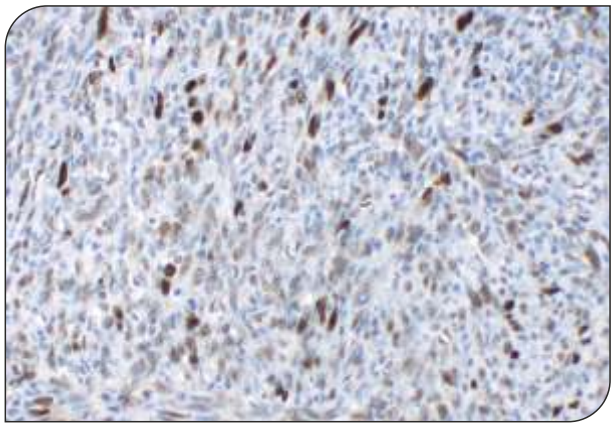
Catalog#	Catalog#	Catalog#
PR274-3ml (RTU)	PR274-6ml (RTU)	—
HAR274-3ml (RTU)	HAR274-6ml (RTU)	—
CR274-0.1ml (Conc)	CR274-0.5ml (Conc)	CR274-1ml (Conc)

TE

Six main highly conserved DNA-binding members (MCM6 to -7) have been well documented to interact with each other, forming a heterohexamer complex. Upon activation by cyclin-dependent kinases, MCM proteins bind to chromatin in late mitosis and G1 lead to initiation of DNA synthesis. MCM proteins disassociate from chromatin after DNA replication to restrict chromosome replication to one round per cell cycle. MCM proteins have been suggested as potentially important biomarkers for cancer diagnosis and prognosis. High MCM6 expression was associated with a significantly shorter survival in mantle cell lymphoma.

Increased MCM6 labeling was also associated with chondrosarcoma histopathological grade. Further, it was shown to be more effect in identifying proliferative activity compared to Ki67. Examination of a combination of MCM2 to -7 demonstrated significantly diminished survival when four or more MCM are over expressed in ER+ breast cancers.

Mouse Monoclonal Anti-Human
MDM2-D7



Liposarcoma stained with Anti-MDM2

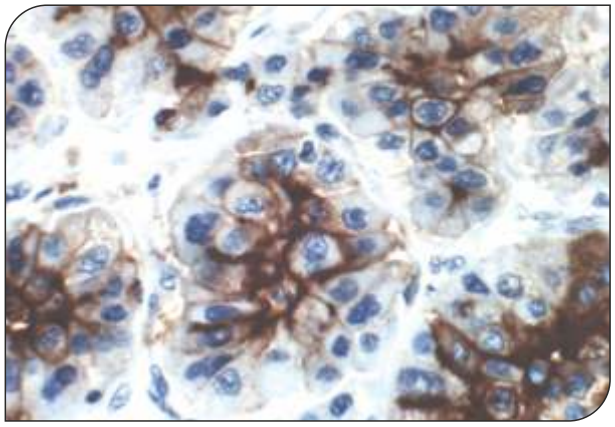
Clone	:	D7
Isotype	:	Mouse IgG2b/k
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Liposarcoma, Breast Ca, Brain

Catalog#	Catalog#	Catalog#
PM263-3ml (RTU)	PM263-6ml (RTU)	—
HAM263-3ml (RTU)	HAM263-6ml (RTU)	—
CM263-0.1ml (Conc)	CM263-0.5ml (Conc)	CM263-1ml (Conc)

TE

p53 is the most commonly mutated gene in human cancer identified to date. Expression of p53 leads to inhibition of cell growth by preventing progression of cells from G1 to S phase of the cell cycle. Most importantly, p53 functions to cause arrest of cells in the G1 phase of the cell cycle following any exposure of cells to DNA damaging agents. The MDM2 (murine double minute 2) protein was initially identified as an oncogene in a murine transformation system. MDM2 functions to bind p53 and block p53 mediated transactivation of co-transfected reporter constructs. The MDM2 gene is amplified in a high percentage of human sarcomas that retain wild type p53 and tumor cells that over express MDM2 can tolerate high levels of p53 expression. These findings argue that MDM2 over expression represents at least one mechanism by which p53 function can be abrogated during tumorigenesis.

Rabbit Monoclonal Anti-Human
MDR-1-EP271



HCC stained with Anti-MDR-1

Clone	:	EP271
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Membrane
Control	:	Liver, Colon Ca, HCC

Catalog#	Catalog#	Catalog#
PR260-3ml (RTU)	PR260-6ml (RTU)	—
CR260-0.1ml (Conc)	CR260-0.5ml (Conc)	CR260-1ml (Conc)

TE

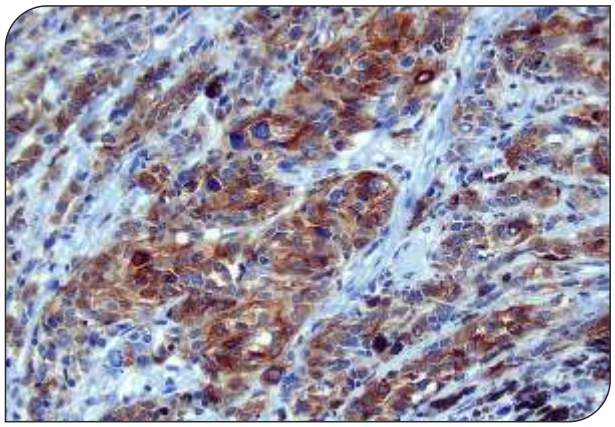
The multi-drug resistance protein 1 (MDR-1), also known as P-glycoprotein 1(PgP), is a conserved plasma membrane protein that functions as an ATP-dependent efflux pump with broad specificity. MDR-1 expression is thought to cause cross-resistance to structurally unrelated anti-cancer drugs, which may decrease intracellular drug concentrations. MDR-1 is typically expressed primarily in regions that act as epithelial barriers or perform excretory function in the liver, kidney, gastrointestinal tract, and the blood brain barrier. In tumors, MDR-1 is widely expressed in many human cancers, commonly found in colon cancer, renal cancer, hepatocellular carcinoma and hematopoietic malignanacies.

E - EDTA BUFFER

TE - TRIS-EDTA BUFFER

C - CITRATE BUFFER

Mouse Monoclonal Anti-Human
Melan-A(MART1)-A103



Melanoma stained with Anti-Melan-A(MART1)

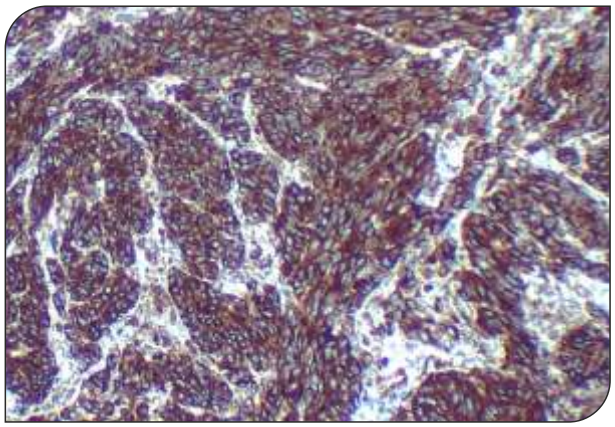
Clone	:	A103
Isotype	:	Mouse IgG1/k
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Melanoma, Skin

Catalog#	Catalog#	Catalog#
PM125-3ml (RTU)	PM125-6ml (RTU)	—
HAM125-3ml (RTU)	HAM125-6ml (RTU)	—
CM125-0.1ml (Conc)	CM125-0.5ml (Conc)	CM125-1ml (Conc)

TE

MART-1 (Melanoma Antigen Recognized by T-cells 1) or MelanA1 is a newly identified melanocyte differentiation antigen recognized by autologous cytotoxic T lymphocytes. MART-1 is present in melanosomes and endoplasmic reticulum.

Mouse Monoclonal Anti-Human
Melanosome-HMB45



Melanoma stained with Anti-Melanosome

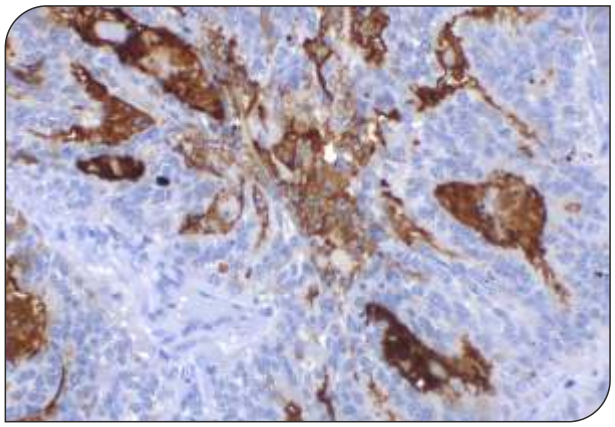
Clone	:	HMB45
Isotype	:	Mouse IgG1/k
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Melanoma

Catalog#	Catalog#	Catalog#
PM097-3ml (RTU)	PM097-6ml (RTU)	—
HAM097-3ml (RTU)	HAM097-6ml (RTU)	—
CM097-0.1ml (Conc)	CM097-0.5ml (Conc)	CM097-1ml (Conc)

TE

This antibody labels immature melanosomes in normal and pathological tissues. Thus the antibody labels fetal and neonatal melanocyte and junctional nevi. Intradermal nevi and normal resting adult melanocytes are negative. Positive staining does not provide distinction between benign and malignant melanocytic proliferation. This antibody may be useful for the identification of melanoma and other tumors showing melanocytic differentiation. Differential identification is aided by the results from a panel of antibodies. In general, tumors of epithelial, lymphoid, glial, and mesenchymal origin are negative.

Rabbit Monoclonal Anti-Human
Mesothelin-EP140



Ovarian Serous Ca stained with Anti-Mesothelin

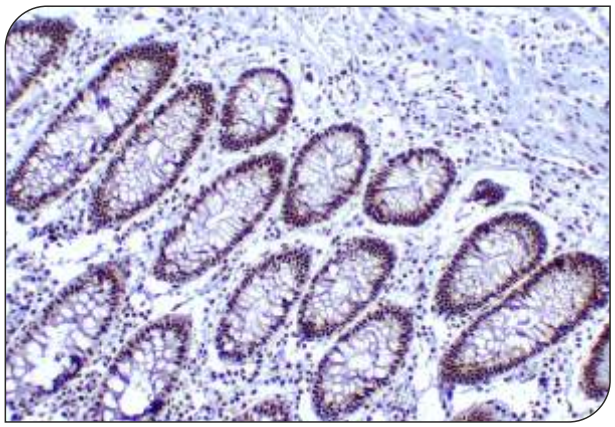
Clone	:	EP140
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Membrane or Cytoplasm
Control	:	Ovarian Serous Ca, Mesothelioma

Catalog#	Catalog#	Catalog#
PR054-3ml (RTU)	PR054-6ml (RTU)	—
HAR054-3ml (RTU)	HAR054-6ml (RTU)	—
CR054-0.1ml (Conc)	CR054-0.5ml (Conc)	CR054-1ml (Conc)

C

The Mesothelin gene encodes a 69-kDa precursor protein that is processed into a 40-kDa glycosylphosphatidylinositol (GPI) anchored protein, the mature mesothelin, present on the cell surface. Its biological function is not known, but recent studies have shown that it forms a strong and specific complex with MUC16; a binding which has been suggested to be the basis of ovarian cancer metastasis. Mesothelin is present on normal mesothelial cells lining the pleura, peritoneum, and pericardium. In tumors, overexpression of Mesothelin has been observed in mesotheliomas, and other tumors including ovarian, pancreatic carcinomas, and cholangiocarcinoma. By using immunotoxin targeting immunotherapy. Mesothelin has also been reported as a new therapeutic target in various types of cancers, such as human cholangiocarcinoma.

Mouse Monoclonal Anti-Human
MLH1-GM011



Colon Ca stained with Anti-MLH1

Clone	:	GM011
Isotype	:	Mouse IgG1
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Colon, Colon Ca

Catalog#	Catalog#	Catalog#
PM098-3ml (RTU)	PM098-6ml (RTU)	—
HAM098-3ml (RTU)	HAM098-6ml (RTU)	—
CM098-0.1ml (Conc)	CM098-0.5ml (Conc)	CM098-1ml (Conc)

TE

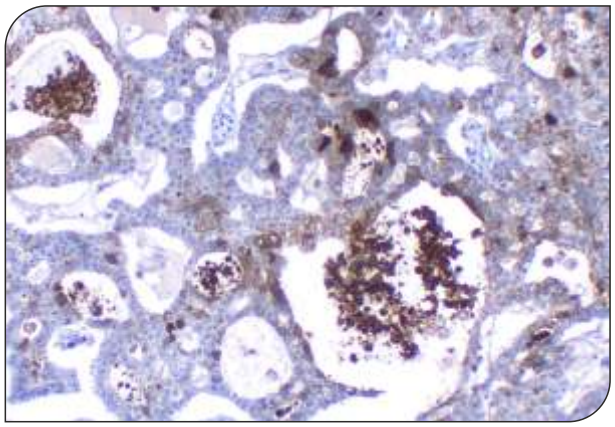
MLH1 is deficient in a high proportion of patients with microsatellite instability (MSI-H). It has been shown that immunohistochemical analysis of MLH1 expression is a practical and reliable method for the routine detection of the vast majority of colorectal carcinomas with high frequency MSI, which are frequently identified in hereditary nonpolyposis cancer (HNPCC) and are account for 15% of sporadic colorectal cancer. MLH1 negative tumors maybe associated with a longer disease free survival.

E - EDTA BUFFER

TE - TRIS-EDTA BUFFER

C - CITRATE BUFFER

Rabbit Monoclonal Anti-Human
MMP7-EP388



Ovarian Adeno Ca stained with Anti-MMP7

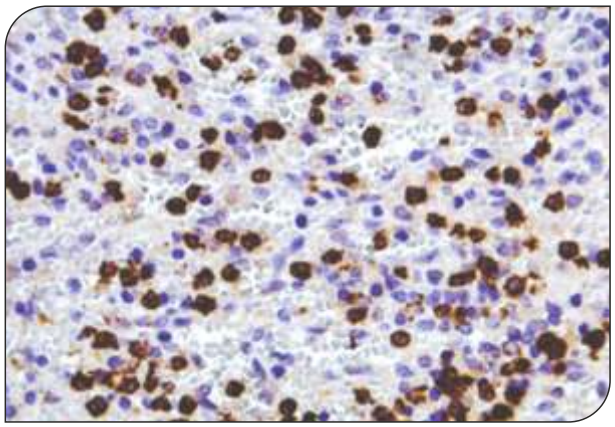
Clone	:	EP388
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Pancreas, Colon Ca, Tonsil, Ovarian Adeno Ca

Catalog#	Catalog#	Catalog#
PR280-3ml (RTU)	PR280-6ml (RTU)	—
CR280-0.1ml (Conc)	CR280-0.5ml (Conc)	CR280-1ml (Conc)

TE

The matrix metalloproteinase-7, MMP7, also known as matrilysin, is a member of the MMP family of zinc and calcium dependent endopeptidases that degrade matrix glycoproteins. MMP7 has proteolytic activity against a broad range of substrates, including collagen, proteoglycans, elastin, laminin, fibronectin and casein. MMP7 plays an important role in tumor invasion and metastases. It is produced in neoplastic cells and upregulated during neoplastic growth. MMP7 expression was reported to be produced by malignant tumor cells in esophageal, gastric, colorectal, head and neck, lung, prostate and hepatocellular carcinoma. Immunohistochemical studies have shown MMP7 expression association with depth of tumor invasion, advanced tumor stage, and recurrence. Progressive MMP7 expression was observed in the transition from normal to adenomatous to carcinomatous colonic mucosa, and overexpressed in 85% of colorectal adnocarcinomas. Overexpression of MMP7 is typically associated with poor prognosis.

Rabbit Monoclonal Anti-Human
MMP9-EP127



Spleen stained with Anti-MMP9

Clone	:	EP127
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Spleen, Breast Ca

Catalog#	Catalog#	Catalog#
PR197-3ml (RTU)	PR197-6ml (RTU)	—
HAR197-3ml (RTU)	HAR197-6ml (RTU)	—
CR197-0.1ml (Conc)	CR197-0.5ml (Conc)	CR197-1ml (Conc)

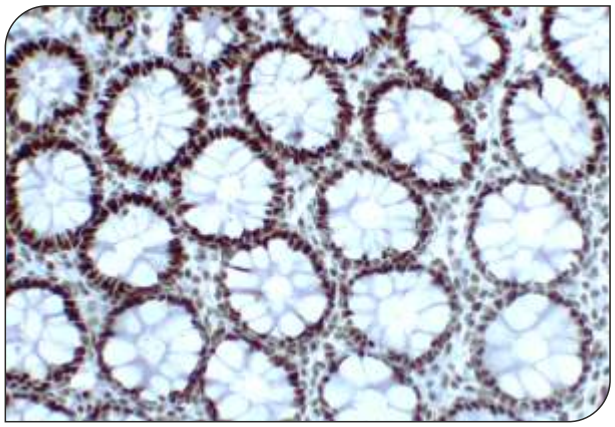
C

Matrix metalloproteinases (MMPs), a family of peptidase enzymes, plays a critical role in degradation of extracellular matrix components in normal physiological processes, such as embryonic development, reproduction, and tissue remodeling, as well as in disease processes. MMP9, also designated as 92-kDa Type IV Collagenase or gelatinase B is a member of MMPs, which is produced as a 92-kDa proenzyme by neutrophils and macrophages as a normal constituent and released into the extracellular environment after activation in inflammatory tissues. MMP9 is predominantly expressed in neutrophils, macrophages, mast cells and stromal cells. The expression levels of MMP9 in tumors are elevated compared with the corresponding normal tissues in a variety of cancer types, including breast, colon, gastric and nasopharyngeal cancers.

Rabbit Monoclonal Anti-Human
MSH2-RED2

TE C

MutS homologue 2 (MSH2) is a DNA mismatch repair protein of the MutS family. MSH2 forms two different heterodimers: MutS alpha (MSH2-MSH6) and MutS beta (MSH2-MSH3) that bind to DNA mismatches, thereby initiating DNA repair. Heterozygous mutations in the MSH2 gene are a cause of Hereditary Nonpolyposis Colorectal Cancer (HNPCC), forming a specific mispair binding complex with MSH3 and MSH6. MSH2 is found in normal cells. Loss of MSH2 is linked to HNPCC and MSI-positive endometrial and ovarian cancers. Immunohistochemical analysis of MSH2 expression has been reported to be a practical and reliable method for the routine detection of the vast majority of MSI-H colorectal adenocarcinomas.



Colon stained with Anti-MSH2

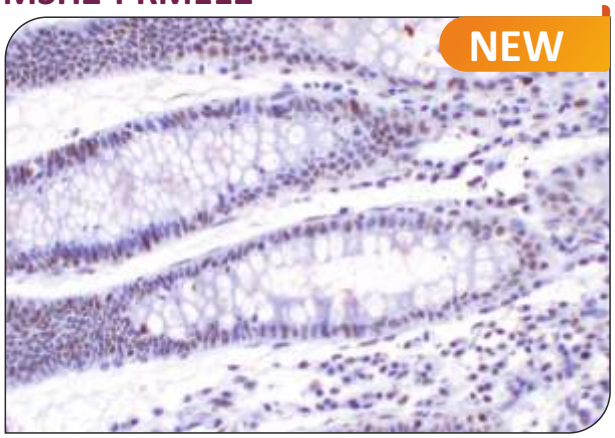
Clone	:	RED2
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Colon

Catalog#	Catalog#	Catalog#
PR055-3ml (RTU)	PR055-6ml (RTU)	—
HAR055-3ml (RTU)	HAR055-6ml (RTU)	—
CR055-0.1ml (Conc)	CR055-0.5ml (Conc)	CR055-1ml (Conc)

Rabbit Monoclonal Anti-Human
MSH2-PRM112

TE

MSH2 is involved in DNA repair as a mismatch repair protein, and mutations of MSH2 are found in approximately 50% of inherited non polyposis colorectal carcinoma (HNPCC) (Lynch syndrome) cases. HNPCC is an autosomal, dominantly inherited disease associated with marked increase in cancer susceptibility. It is characterized by a familial predisposition to early onset colorectal carcinoma and extra-colonic cancers of the gastrointestinal, urological and female reproductive tracts. HNPCC is reported to be the most common form of inherited colorectal cancer in the western world.

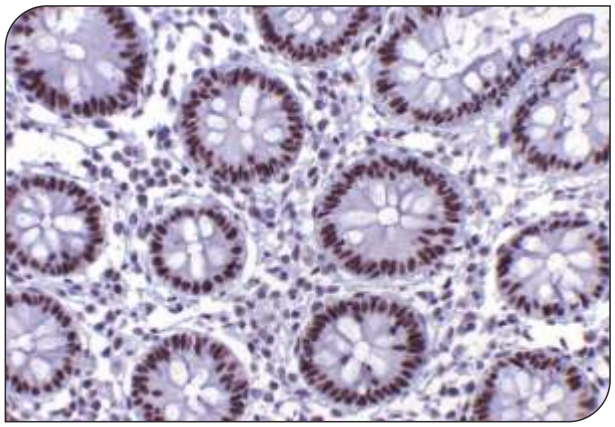


Colon stained with Anti-MSH2

Clone	:	PRM112
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Colon Ca, Colon

Catalog#	Catalog#	Catalog#
PR313-3ml (RTU)	PR313-6ml (RTU)	—
HAR313-3ml (RTU)	HAR313-6ml (RTU)	—
CR313-0.1ml (Conc)	CR313-0.5ml (Conc)	CR313-1ml (Conc)

Rabbit Monoclonal Anti-Human
MSH3-PRM119



Colon stained with Anti-MSH3

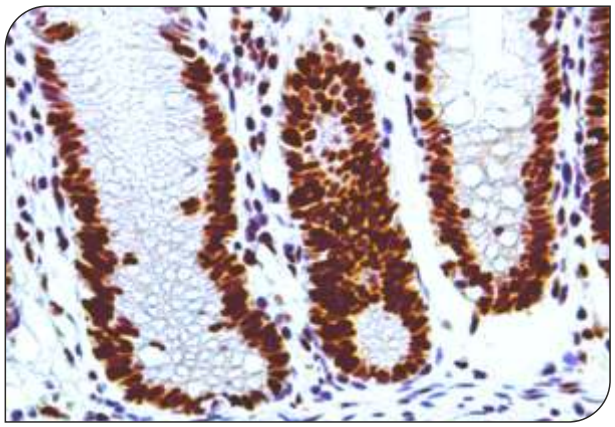
Clone	:	PRM119
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Colon Ca, Colon

Catalog#	Catalog#	Catalog#
PR320-3ml (RTU)	PR320-6ml (RTU)	—
HAR320-3ml (RTU)	HAR320-6ml (RTU)	—
CR320-0.1ml (Conc)	CR320-0.5ml (Conc)	CR320-1ml (Conc)

TE

Component of the post-replicative DNA mismatch repair system (MMR). Heterodimerizes with MSH2 to form MutS beta which binds to DNA mismatches thereby initiating DNA repair. When bound, the MutS beta heterodimer bends the DNA helix and shields approximately 20 base pairs. MutS beta recognizes large insertion-deletion loops (IDL) up to 13 nucleotides long. After mismatch binding, forms a ternary complex with the MutL alpha heterodimer, which is thought to be responsible for directing the downstream MMR events, including strand discrimination, excision, and resynthesis.

Rabbit Monoclonal Anti-Human
MSH6-EP49



Colon stained with Anti-MSH6

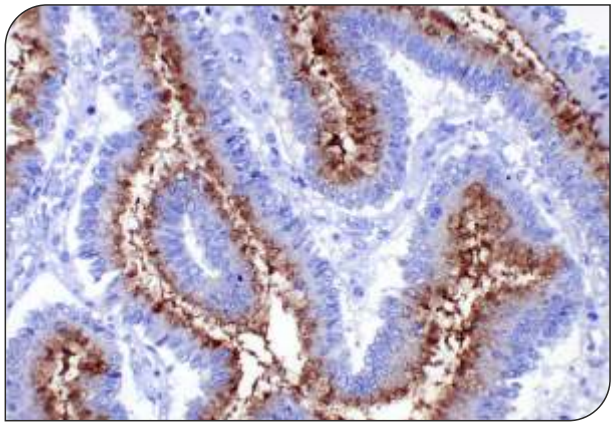
Clone	:	EP49
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Colon, Breast Ca

Catalog#	Catalog#	Catalog#
PR056-3ml (RTU)	PR056-6ml (RTU)	—
HAR056-3ml (RTU)	HAR056-6ml (RTU)	—
CR056-0.1ml (Conc)	CR056-0.5ml (Conc)	CR056-1ml (Conc)

TE

The MutS homologue 6 protein (MSH6) is a member of the MutS homolog family required in the DNA mismatch repair system. Carriers of the mismatch repair gene mutations have a high lifetime risk of developing Hereditary Non-Polyposis Colon Cancer (HNPCC) and several other cancers including endometrial cancer due to microsatellite instability (MSI) caused by accumulation of DNA replication errors in proliferating cells. MSH6 antibody is useful for screening and diagnosis of patients with MSI. The level of MSI has been reported to be associated with prognosis in colon cancer.

Rabbit Monoclonal Anti-Human
MUC1-EP85



Lung Ca stained with Anti-MUC1

Clone	:	EP85
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Membrane or Cytoplasm
Control	:	Colon, Colon Ca, Lung Ca

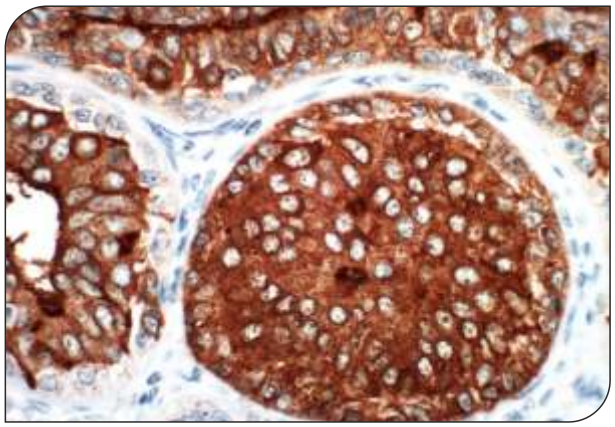
Catalog#	Catalog#	Catalog#
PR149-3ml (RTU)	PR149-6ml (RTU)	—
HAR149-3ml (RTU)	HAR149-6ml (RTU)	—
CR149-0.1ml (Conc)	CR149-0.5ml (Conc)	CR149-1ml (Conc)

TE

Mucins are a family of heavily glycosylated high molecular weight glycoproteins. A total of 21 mucins have been identified to date. Mucins are well known for its involvement in the protection and lubrication of luminal epithelial surfaces. MUC1, a transmembrane mucin, has been shown to be involved in several signaling pathways, including Ras, Beta catenin, p120 catenin, p53 and estrogen receptor alpha. When MUC1 forms a complex with beta-catenin, it enters the nucleus to activate T-cell factor/leukocyte enhancing factor 1 transcription factors and gene expression.

In addition, MUC1 may inhibit cell-cell and cell-stroma interactions and function as a signal transducer, participating in cancer progression. MUC1 is expressed in many types of epithelial cells in gastrointestinal tract, lung, breast, pancreas and genitourinary tract.

Mouse Monoclonal Anti-Human
MUC1-GP1.4+E29



Breast Ca stained with Anti-MUC1

Clone	:	GP1.4+E29
Isotype	:	Mouse IgG1,k+IgG2a,l
Reactivity	:	Human, FFPE
Localization	:	Membrane and Cytoplasm
Control	:	Colon Ca, Breast Ca

Catalog#	Catalog#	Catalog#
PM189-3ml (RTU)	PM189-6ml (RTU)	—
HAM189-3ml (RTU)	HAM189-6ml (RTU)	—
CM189-0.1ml (Conc)	CM189-0.5ml (Conc)	CM189-1ml (Conc)

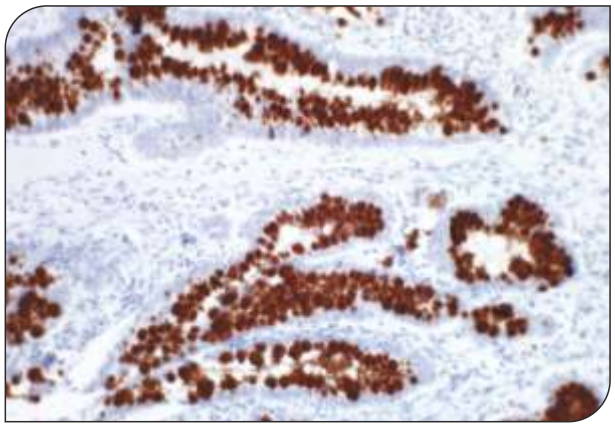
TE

This gene encodes a membrane-bound protein that is a member of the mucin family. Mucins are O- glycosylated proteins that play an essential role in forming protective mucous barriers on epithelial surfaces These proteins also play a role in intracellular signaling. This protein is expressed on the apical surface of epithelial cells that line the mucosal surfaces of many different tissues including lung, breast stomach and pancreas. This protein is proteolytically cleaved into alpha and beta subunits that form a heterodimeric complex. The N-terminal alpha subunit functions in cell-adhesion and the C-terminal beta subunit is involve cell signaling. Overexpression, aberrant intracellular localization, and changes in glycosylation of this protein have been associated with carcinomas. This gene is known to contain a highly polymorphic variable number tandem repeats (VNTR) domain. Alternate splicing results in multiple transcript variants.

Rabbit Monoclonal Anti-Human
MUC2-EP187

E TE

Mucins are high molecular weight glycoproteins produced by many epithelial tissues. MUC2 is a member of the mucin protein family. MUC2 is secreted and forms an insoluble mucous barrier that protects the gut lumen. MUC2 is the major secretory glycoprotein specifically expressed in goblet cells of the intestinal and airway epithelium. Its expression is a common feature of all mucinous carcinomas derived from different organs including breast, stomach, colon and prostate where it may act as a potential prognostic indicator



Colon stained with Anti-MUC2

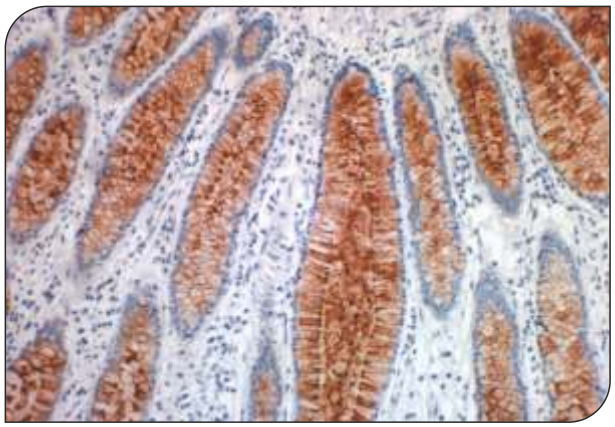
Clone	:	EP187
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Colon, Mucinous Ca

Catalog#	Catalog#	Catalog#
PR194-3ml (RTU)	PR194-6ml (RTU)	—
HAR194-3ml (RTU)	HAR194-6ml (RTU)	—
CR194-0.1ml (Conc)	CR194-0.5ml (Conc)	CR194-1ml (Conc)

Rabbit Monoclonal Anti-Human
MUC4-EP256

E

MUC4 is a high molecular weight glycoprotein that plays an important role in cell proliferation and differentiation of epithelial cells. The MUC4 gene is expressed in various normal epithelial tissues of endodermic origin and carcinomas derived from these tissues. MUC4 antibody labels normal epithelial cells in the trachea, GI tract and prostate, but not in the pancreas. Increased expression of MUC4 has been observed in pancreatic carcinoma and cervical squamous carcinoma. MUC4 is helpful in differentiating lung adenocarcinoma (positive) from malignant mesothelioma (negative). Additionally, MUC4 is useful in the identification of low grade fibromyxoid sarcoma (LGFMS), and sclerosing epithelioid fibrosarcoma

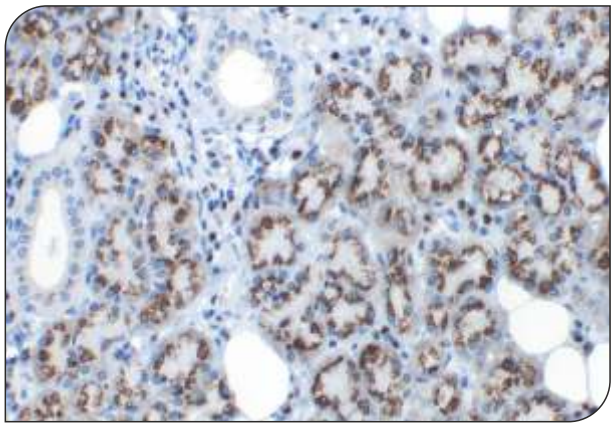


Colon stained with Anti-MUC4

Clone	:	EP256
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Membrane or Cytoplasm
Control	:	Colon, Lung Ca

Catalog#	Catalog#	Catalog#
PR136-3ml (RTU)	PR136-6ml (RTU)	—
HAR136-3ml (RTU)	HAR136-6ml (RTU)	—
CR136-0.1ml (Conc)	CR136-0.5ml (Conc)	CR136-1ml (Conc)

Mouse Monoclonal Anti-Human
MUC5AC-CLH2



Tongue stained with Anti-MUC5AC

Clone	:	CLH2
Isotype	:	Mouse IgG1k
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Tongue, Stomach

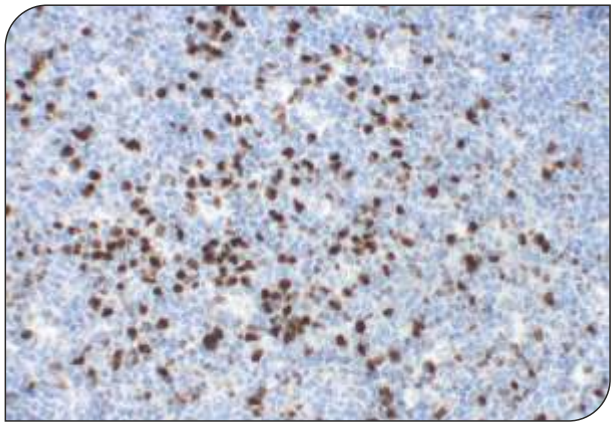
Catalog#	Catalog#	Catalog#
PM233-3ml (RTU)	PM233-6ml (RTU)	—
HAM233-3ml (RTU)	HAM233-6ml (RTU)	—
CM233-0.1ml (Conc)	CM233-0.5ml (Conc)	CM233-1ml (Conc)

TE

Mucin5AC glycoprotein (MUC5AC) is a HMW glycoprotein belonging to the superfamily of mucins. Mucins are produced by epithelial cells and can be divided into two families; secretory mucins and membrane bound mucins. MUC5AC is a mucus forming, secreted mucin that is found in normal gastric and tracheobronchial mucosa, but absent from normal colon. MUC5AC expression is present in primary ovarian mucinous cancer but usually absent in colorectal adenocarcinoma, thus showing an expression pattern opposite to MUC2. Together with a panel of antibodies, Anti-MUC5AC may be useful for differential identification of primary mucinous ovarian tumors from colon adenocarcinoma metastatic to the ovary.

MUC5AC antibodies may also be useful for identification of intestinal metaplasia as well as in the identification of pancreatic carcinoma and pre-cancerous changes vs normal pancreas.

Rabbit Monoclonal Anti-Human
MUM1-EP190



Tonsil stained with Anti-MUM1

Clone	:	EP190
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus or Cytoplasm
Control	:	Tonsil, Plasmacytoma

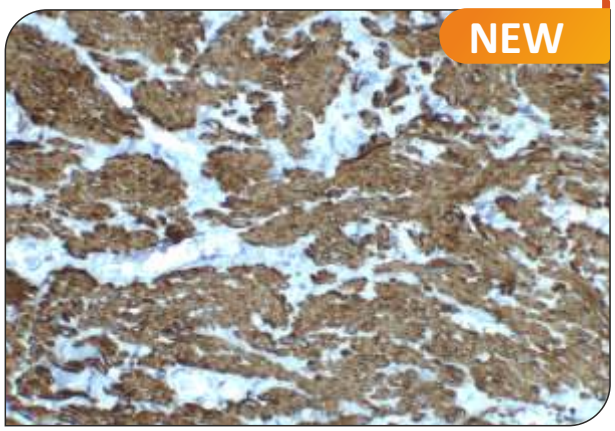
Catalog#	Catalog#	Catalog#
PR112-3ml (RTU)	PR112-6ml (RTU)	—
HAR112-3ml (RTU)	HAR112-6ml (RTU)	—
CR112-0.1ml (Conc)	CR112-0.5ml (Conc)	CR112-1ml (Conc)

E

MUM1 (multiple myeloma oncogene-1, also called IRF4), a member of the IRF family transcriptional factors, is induced by antigen receptor mediated stimuli and plays a crucial role in cell proliferation, differentiation and survival. In the hematolymphoid system, MUM1 is primarily expressed in B-cells and actived T-lymphoid cells. In B-cells it is expressed on a small subset of germinal center (GC) cells committed to plasmacytic or memory cell differentiation in the "light zone" and in plasma cells. MUM1 has been identified as a marker of non-germinal center derived DLBCL, a subtype also associated with more aggressive clinical behavior and poor prognosis, but absent in mantle cell lymphoma (pre-GC B-cells) and in follicular lymphoma (GC B-cells). MUM1 may be a potential histogenetic marker for B-cell lymphomas. Additionally, MUM1 is a useful marker for Reed-Sternberg (HRS) cells in Hodgkin's lymphoma.

Mouse Monoclonal Anti-Human

Muscle Actin-HUC1-1



Smooth Muscle stained with Anti-Muscle Actin

Clone	:	HUC1-1
Isotype	:	Mouse IgG2ak
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm and/or Membrane
Control	:	Smooth Muscle, Solitary Fibrous Tumor, Rhabdomyosarcoma, Leiomyosarcoma, Skeletal Muscle

Catalog#	Catalog#	Catalog#
PM365-3ml (RTU)	PM365-6ml (RTU)	—
HAM365-3ml (RTU)	HAM365-6ml (RTU)	—
CM365-0.1ml (Conc)	CM365-0.5ml (Conc)	CM365-1ml (Conc)

TE All eukaryotic cells express Actin, which often constitutes as much as 50% of total cellular protein. Actin filaments can form both stable and labile structures and are crucial components of microvilli and the contractile apparatus of muscle cells. While lower eukaryotes, such as yeast, have only one Actin gene, higher eukaryotes have several isoforms encoded by a family of genes. At least six types of Actin are present in mammalian tissues and fall into three classes. α-Actin expression is limited to various types of muscle, whereas β-Actin and g-Actin are the principle constituents of filaments in other tissues. Members of the small GTPase family regulate the organization of the Actin cytoskeleton. Rho controls the assembly of Actin stress fibers and focal adhesion. Rac regulates Actin filament accumulation at the plasma membrane. Cdc42 stimulates formation of filopodia.

Rabbit Monoclonal Anti-Human

Myelin Basic Protein-EP207

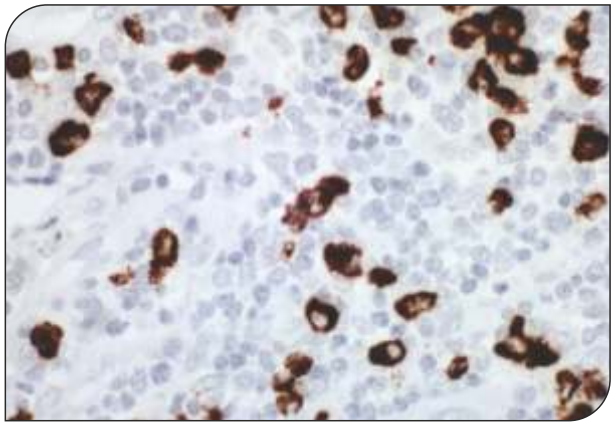
Brain Stained with Mylein Basic Protein

Clone	:	EP207
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Brain, Oligodendroglioma

Catalog#	Catalog#	Catalog#
PR299-3ml (RTU)	PR299-6ml (RTU)	—
HAR299-3ml (RTU)	HAR299-6ml (RTU)	—
CR299-0.1ml (Conc)	CR299-0.5ml (Conc)	CR299-1ml (Conc)

TE Myelin basic protein (MBP) is an intracellular protein with a highly flexible structure found in myelin of the central and peripheral nervous systems (CNS, PNS). MBP is often post-translationally modified in various ways, which includes citrullination, N-terminal acylation, deamidation and phosphorylation. MBP is expressed in oligodendrocytes in the CNS and Schwann cells in the peripheral nervous system. In the abnormal tissues, Oligodendroglioma, considered to be derived from oligodendrocytes, highly expresses MBP. MBP has also been found in tumors of the nerve sheath, including schwannoma, neurofibroma, granular cell tumors and neurogenic sarcoma. Additionally, MBP is a sensitive marker for early human fetal myelination.

Rabbit Monoclonal Anti-Human
Myeloperoxidase-EP151



Tonsil stained with Anti-Myeloperoxidase

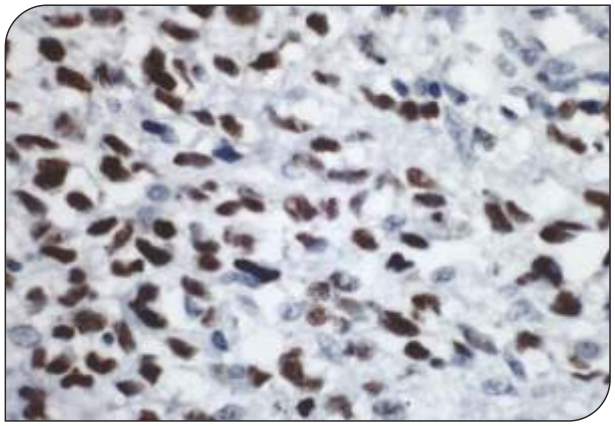
Clone	:	EP151
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Spleen, Myelogenous Leukemia, Tonsil

Catalog#	Catalog#	Catalog#
PR057-3ml (RTU)	PR057-6ml (RTU)	—
HAR057-3ml (RTU)	HAR057-6ml (RTU)	—
CR057-0.1ml (Conc)	CR057-0.5ml (Conc)	CR057-1ml (Conc)

TE

Myeloperoxidase (MPO), a heme protein, is a major component of azurophilic granules of neutrophil granulocytes (NGs). Optimal oxygen dependent microbicidal activity depends on MPO as the critical enzyme for the generation of hypochlorous acid and other toxic oxygen products, which are thought to contribute to tissue damage during inflammation. MPO is a marker for myeloid cells. It may also be weakly expressed in cells of monocytic origin. It is useful for differentiating acute myelogenous leukemia from acute lymphoblastic leukemia, In addition, MPO is thought to be involved in the pathology Alzheimer's disease.

Rabbit Monoclonal Anti-Human
MyoD1-EP212



Rhabdomyosarcoma stained with Anti-MyoD1

Clone	:	EP212
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Rhabdomyosarcoma, Fetal Muscle

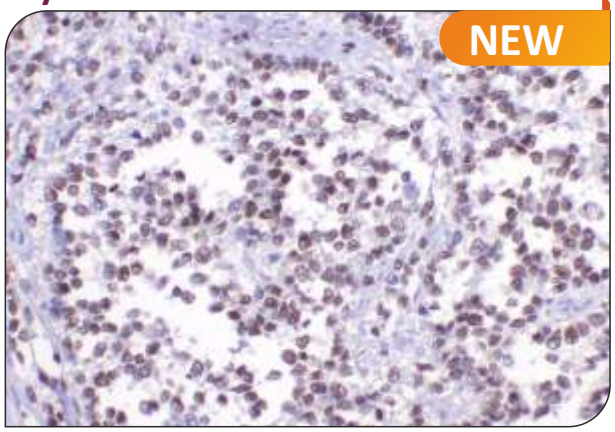
Catalog#	Catalog#	Catalog#
PR058-3ml (RTU)	PR058-6ml (RTU)	—
HAR058-3ml (RTU)	HAR058-6ml (RTU)	—
CR058-0.1ml (Conc)	CR058-0.5ml (Conc)	CR058-1ml (Conc)

TE

MyoD1 is a protein with a key role in regulating muscle differentiation. It regulates muscle cell differentiation by inducing cell cycle arrest, a prerequisite for myogenic initiation. The protein is also involved in muscle regeneration. MyoD1 is expressed in developing skeletal muscle tissue but faintly in adult skeletal muscle.

In abnormal tissues, it labels tumor cell in Rhabdomyosarcoma. MyoD1 is one of the earliest markers of myogenic commitment. Antibody to MyoD1 has been useful to differentiate rhabdomyosarcomas from other tumors. It is a sensitive and specific marker for myogenic differentiation.

Rabbit Monoclonal Anti-Human
MyoD1-HLHTP



Rhabdomyosarcoma stained with Anti-MyoD1

Clone	:	HLHTP
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Rhabdomyosarcoma

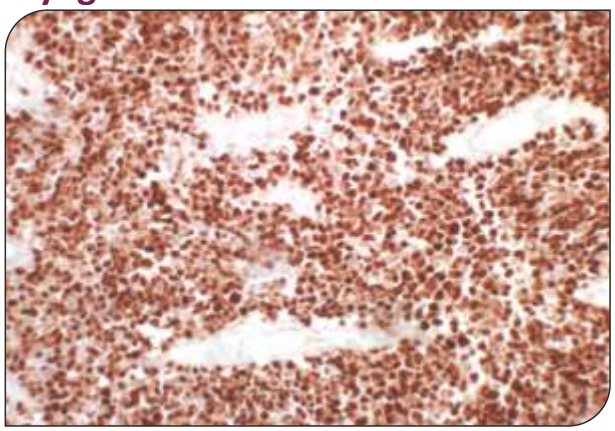
Catalog#	Catalog#	Catalog#
PR330-3ml (RTU)	PR330-6ml (RTU)	—
HAR330-3ml (RTU)	HAR330-6ml (RTU)	—
CR330-0.1ml (Conc)	CR330-0.5ml (Conc)	CR330-1ml (Conc)

TE

MyoD1, one of the MyoD family of myogenic helix-loop-helix transcription factors, combined with myogenin, plays a role in coordinating the myogenic differentiation pathway from the determination of mesodermal precursors into myoblasts, the differentiation of myoblasts into myotubes, and finally the maturation of myotubes into skeletal myofibers. Normal mature skeletal muscle does not express MyoD1 protein. MyoD1 is expressed in myoblasts before differentiation while myogenin has post-differentiation functions. Anti-MyoD1 immunostaining identifies cells committed to myogenesis in their earliest phase, thus, it is a better biomarker for less differentiated Rhabdomyosarcomas (RMS).

RMS are the most frequent malignant soft tissue neoplasms of childhood. While better differentiated RMS have cross-striations or rhabdomyoblasts that allow for a confident morphologic diagnosis, less differentiated RMS resemble other small blue round-cell tumors. Studies suggest, anti-MyoD1 may be used together with anti-myogenin and anti-desmin as a panel of markers since any RMS is virtually never negative for all three markers simultaneously.

Mouse Monoclonal Anti-Human
Myogenin-MGN185+F5D



Rhabdomyosarcoma stained with Anti-Myogenin

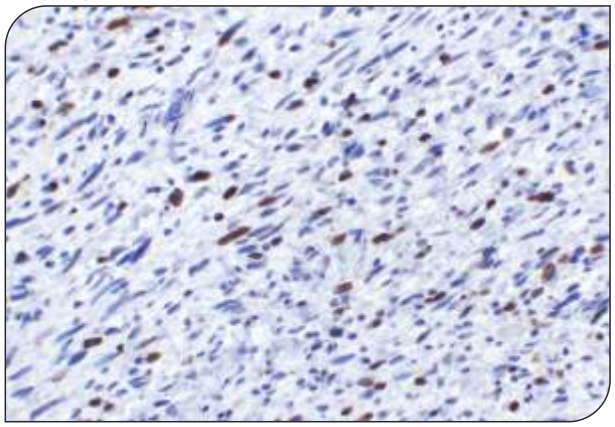
Clone	:	MGN185+F5D
Isotype	:	Mouse IgG1,k+Mouse IgG1,k
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Rhabdomyosarcoma, Skeletal Muscle

Catalog#	Catalog#	Catalog#
PM153-3ml (RTU)	PM153-6ml (RTU)	—
HAM153-3ml (RTU)	HAM153-6ml (RTU)	—
CM153-0.1ml (Conc)	CM153-0.5ml (Conc)	CM153-1ml (Conc)

TE

Myogenin is a member of the MyoD family of myogenic basic helix-loop-helix (bHLH) transcription factors that also includes MyoD, Myf-5, and MRF4 (also known as herculinor Myf-6). MyoD family members are expressed exclusively in skeletal muscle and play a key role in activating myogenesis by binding to enhancer sequences of muscle-specific genes. The regulatory domain of MyoD is approximately 70 amino acids in length and includes both a basic DNA binding motif and a bHLH dimerization motif. MyoD family members share about 80% amino acid homology in their bHLH motifs. Anti-myogenin labels the nuclei of myoblasts in developing muscle tissue, and is expressed in tumor cell nuclei of rhabdomyosarcoma and some leiomyosarcomas. Positive nuclear staining may occur in Wilm's tumor.

Rabbit Monoclonal Anti-Human
Myogenin-EP162



Rhabdomyosarcoma stained with Anti-Myogenin

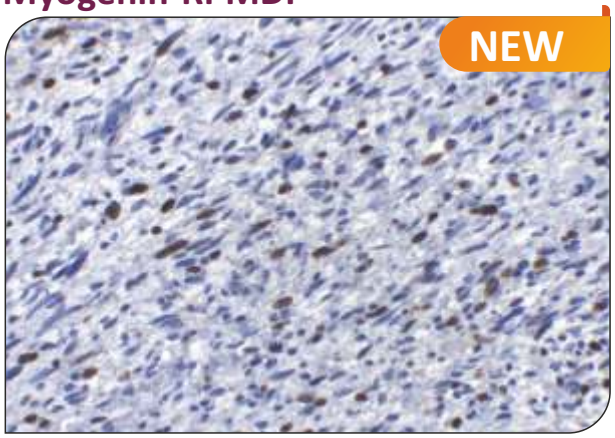
Clone	:	EP162
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Skeletal Muscle, Rhabdomyosarcoma

Catalog#	Catalog#	Catalog#
PR165-3ml (RTU)	PR165-6ml (RTU)	—
HAR165-3ml (RTU)	HAR165-6ml (RTU)	—
CR165-0.1ml (Conc)	CR165-0.5ml (Conc)	CR165-1ml (Conc)

TE

Myogenic factors are transcription factors consisting of an amino acid rich region and a helixloophelix (HLH) structure, which can promote muscle development and maintain muscle specific gene expression by transactivation. Myogenin, one of the myogenic regulatory factors, plays a key role in determining the commitment and differentiation of primitive mesenchymal cells into skeletal muscle. The expression of Myogenin is restricted to cells of skeletal muscle origin, but it is not detected in adult skeletal muscles. It is therefore considered to be an extremely reliable and specific marker for diagnosing rhabdomyosarcomas.

Rabbit Monoclonal Anti-Human
Myogenin-RPMDP



Rhabdomyosarcoma stained with Anti-Myogenin

Clone	:	RPMDP
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Rhabdomyosarcoma

Catalog#	Catalog#	Catalog#
PR344-3ml (RTU)	PR344-6ml (RTU)	—
HAR344-3ml (RTU)	HAR344-6ml (RTU)	—
CR344-0.1ml (Conc)	CR344-0.5ml (Conc)	CR344-1ml (Conc)

TE

Myogenin belongs to a family of regulatory proteins essential for muscle development.Myogenin is expressed on cells of skeletal muscle origin, and appears to be inversely related to the degree of cellular differentiation.The antibody is a useful aid for classification of rhabdomyosarcomas and Wilms' tumors. No reactivity with Ewing's sarcoma/peripheral primitive neuroectodermal tumor, neuroblastoma, or adult skeletal muscle has been observed.

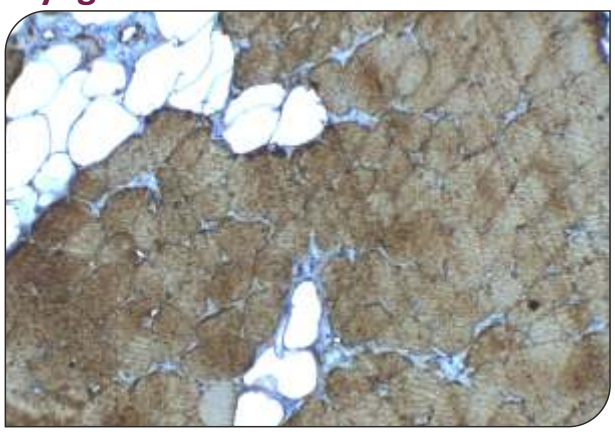
E - EDTA BUFFER

TE - TRIS-EDTA BUFFER

C - CITRATE BUFFER

Rabbit Monoclonal Anti-Human
Myoglobin-EP87

C TE



Skeletal Muscle stained with Anti-Myoglobin

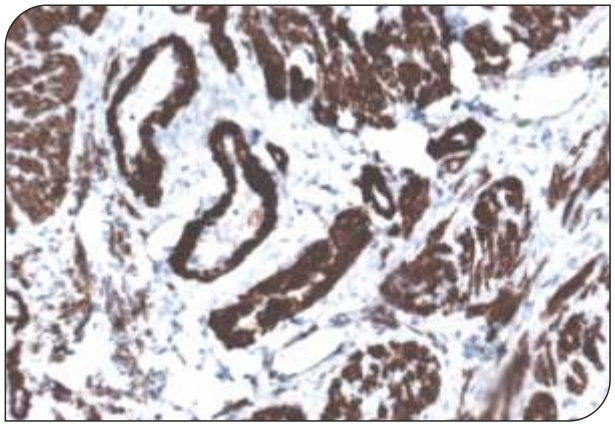
Clone	:	EP87
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm and/or Nucleus
Control	:	Skeletal Muscle, Rhabdomyosarcoma

Catalog#	Catalog#	Catalog#
PR173-3ml (RTU)	PR173-6ml (RTU)	—
HAR173-3ml (RTU)	HAR173-6ml (RTU)	—
CR173-0.1ml (Conc)	CR173-0.5ml (Conc)	CR173-1ml (Conc)

Myoglobin, an intracellular haemoprotein expressed in the heart and oxidative skeletal myofibres of vertebrates, binds molecular oxygen and may facilitate oxygen transport from erythrocytes to mitochondria, thereby maintaining cellular respiration during periods of high physiological demand. Antibody to myoglobin labels skeletal and cardiac muscle cells. In combination with other striated muscle markers such as vimentin and myogenin, myoglobin is helpful in identification of rhabdomyosarcoma and tumors with skeletal muscle differentiation. Recently, myoglobin has been reported to be expressed on epithelial cancer cells due to changed metabolic and environmental conditions. Myoglobin expression on cancer cells may play a causative role in tumor progression.

Rabbit Monoclonal Anti-Human
Myosin Heavy Chain-EP166

TE



Myometrium stained with Anti-Myosin Heavy Chain

Clone	:	EP166
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Smooth muscle, Testis, Uterus, Tongue

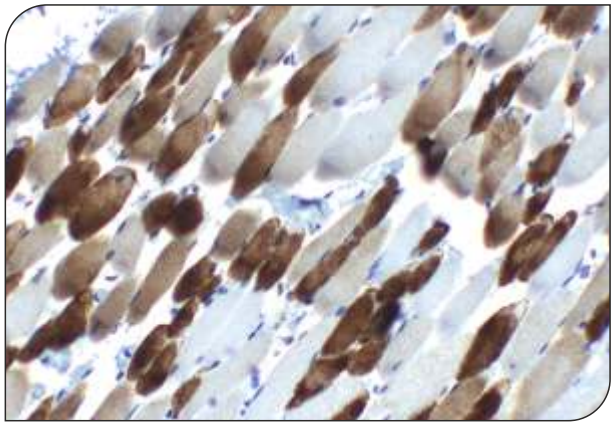
Catalog#	Catalog#	Catalog#
PR253-3ml (RTU)	PR253-6ml (RTU)	—
HAR253-3ml (RTU)	HAR253-6ml (RTU)	—
CR253-0.1ml (Conc)	CR253-0.5ml (Conc)	CR253-1ml (Conc)

Myosin heavy chain 11 (MYH11) is a smooth musclemyosin belonging to the myosin heavy chain family. It is a subunit of a hexameric protein that consists of two heavy chain subunits and two pairs of non-identical light chain subunits. Myosin heavy chain functions as a major contractile protein converting chemical energy into mechanical energy through the hydrolysis of ATP. An aberration in this protein is associated with acute myeloid leukemia of the M4Eo subtype.

MYH labels smooth muscle cells and myoepithelial cells in various tissues. The immunoreactivity in glial cells of the cerebellum and spermatocytes in the testis is also observed. MYH has been a useful marker for myoepithelial cell as well as smooth muscle cell differentiation.

Rabbit Monoclonal Anti-Human

Myosin Light Chain-EP99



Skeletal Muscle stained with Anti-Myosin Light Chain

Clone	:	EP99
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Skeletal Muscle, Tongue SCC

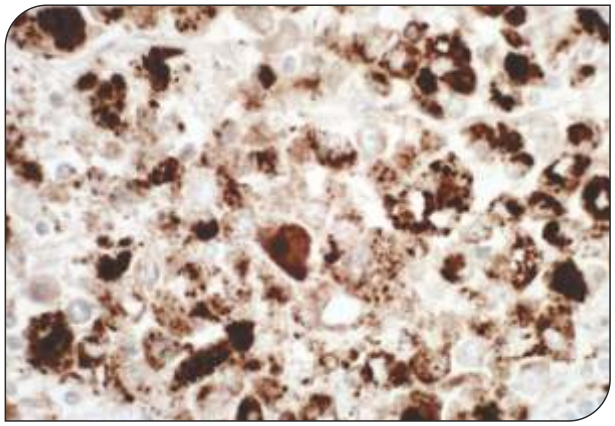
Catalog#	Catalog#	Catalog#
PR257-3ml (RTU)	PR257-6ml (RTU)	—
HAR257-3ml (RTU)	HAR257-6ml (RTU)	—
CR257-0.1ml (Conc)	CR257-0.5ml (Conc)	CR257-1ml (Conc)

C

Myosin is a hexamer of 2 identical heavy chains and 2 pairs of light chains. The two pairs of light chains of muscle myosins are called essential light chains (ELC) and regulatory light chains (RLC). The light chains stabilize the long alpha helical neck of the myosin head. Myosin light chain-2 (MYL2), also known as the regulatory light chain of myosin, is an important protein involved in the regulation of myosin ATPase activity. Calcium triggers the phosphorylation of MYL2 that in turn triggers contraction. Defects in MYL2 are the cause of cardiomyopathy familial hypertrophic type 10 and mid-left ventricular chamber type 2. An increase in ventricular MYL2 is observed during myocardial hypertrophy in cardiac patients with valve stenosis. This antibody reacts with cardiac and skeletal muscle.

Rabbit Monoclonal Anti-Human

Napsin A-EP205



Lung Ca stained with Anti-Napsin A

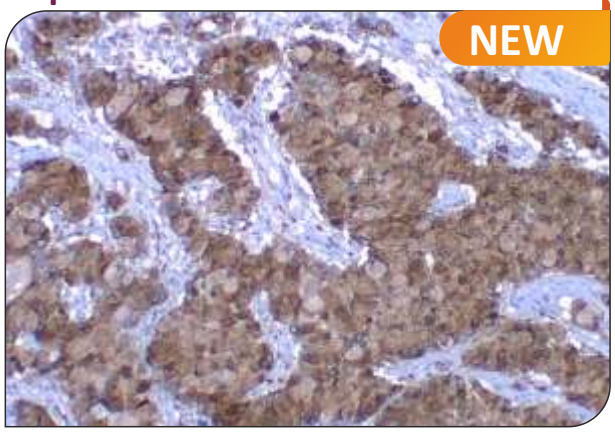
Clone	:	EP205
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Lung Adeno Ca, Lung

Catalog#	Catalog#	Catalog#
PR059-3ml (RTU)	PR059-6ml (RTU)	—
HAR059-3ml (RTU)	HAR059-6ml (RTU)	—
CR059-0.1ml (Conc)	CR059-0.5ml (Conc)	CR059-1ml (Conc)

TE

Napsin A is an aspartic proteinase that belongs to the peptidase A1 family and plays a role in pneumocyte surfactant processing. In normal tissue, Anti-Napsin A specifically labels type II pneumocytes in adult lung and epithelial cells in kidney tissues. In abnormal tissues, Napsin A is strongly positive in over 80% of primary lung adenocarcinomas and 79% of renal cell carcinoma by immunohistochemistry. Napsin A is a useful marker for lung adenocarcinoma. The combined use of Napsin A and thyroid transcription factor (TTF) improves the sensitivity and specificity for identification of pulmonary adenocarcinoma.

Rabbit Monoclonal Anti-Human
Napsin A-PRM124



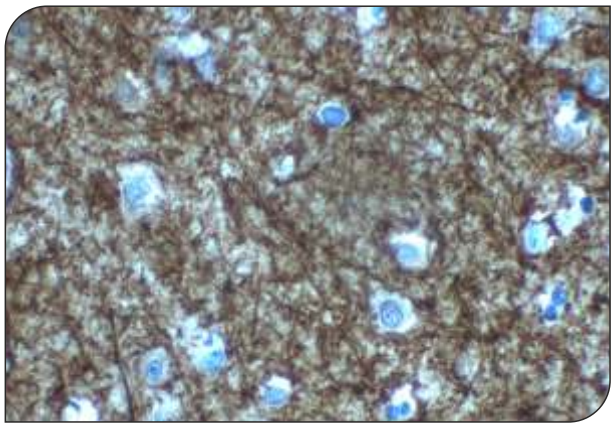
Lung Adeno Ca stained with Anti-Napsin A

Clone	:	PRM124
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Lung Adeno Ca

Catalog#	Catalog#	Catalog#
PR326-3ml (RTU)	PR326-6ml (RTU)	—
HAR326-3ml (RTU)	HAR326-6ml (RTU)	—
CR326-0.1ml (Conc)	CR326-0.5ml (Conc)	CR326-1ml (Conc)

TE The activation peptides of aspartic proteinases play a role as inhibitors of the active site. These peptide segments, or pro-parts, are deemed important for correct folding, targeting, and control of the activation of aspartic proteinase zymogens. The pronapsin A gene is expressed predominantly in lung and kidney. Its translation product is predicted to be a fully functional glycosylated aspartic proteinase precursor containg an RGD motif and an addition 18 residues at its C-terminus.In normal tissue, Napsin A antibody labels type II pneumocytes in adult lung and epithelial cells in kidney tissues. In abnormal tissues, Napsin A is a useful marker for lung adenocarcinoma.

Rabbit Monoclonal Anti-Human
Neurofilament-EP79



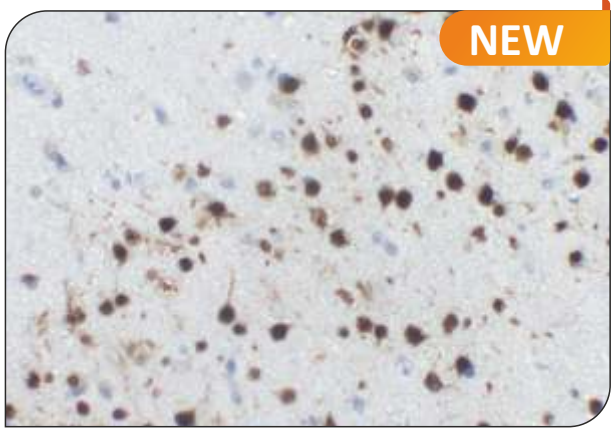
Brain stained with Anti-Neurofilament

Clone	:	EP79
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Brain

Catalog#	Catalog#	Catalog#
PR060-3ml (RTU)	PR060-6ml (RTU)	—
HAR060-3ml (RTU)	HAR060-6ml (RTU)	—
CR060-0.1ml (Conc)	CR060-0.5ml (Conc)	CR060-1ml (Conc)

C Neuofilaments (NF) are members of the intermediate filament protein family. These neuron specific filaments are the major constituents of the axonal cytoskeleton. NFs are composed of three major proteins: NFH is the heavy molecular weight protein (200 kDa), NF-M the large (160 kDa) and NF-L the light protein (68kDa). The NF-L and NF-M mRNAs are detected early in the embryonal brain, with a progressive increase in their levels during development, while the NFH mRNA is barely detectable at embryonal stages but accumulates later in the postnatal brain. This antibody labels neurons of the central and peripheral nervous system and is a useful for the identification of tumors with neuronal differentiation.

Rabbit Monoclonal Anti-Human
NeuN-PFOX3



Oligodendroglioma stained with Anti-NeuN

Clone	:	PFOX3
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Oligodendroglioma

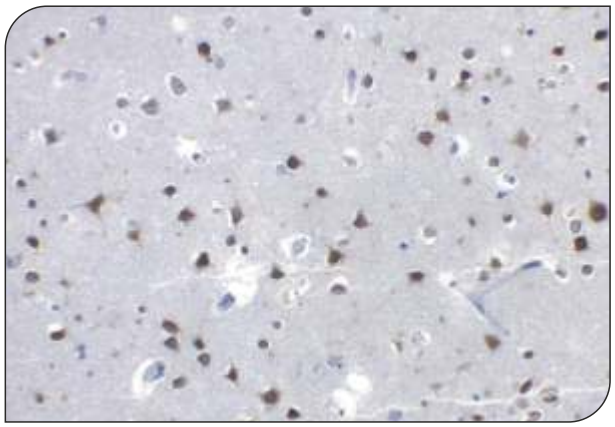
Catalog#	Catalog#	Catalog#
PR310-3ml (RTU)	PR310-6ml (RTU)	—
HAR310-3ml (RTU)	HAR310-6ml (RTU)	—
CR310-0.1ml (Conc)	CR310-0.5ml (Conc)	CR310-1ml (Conc)

TE

NeuN (Feminizing Locus on X-3, Fox-3, or Hexaribonucleotide Binding Protein-3) is a neuron-specific protein that is present in most Central Nervous System (CNS) and Peripheral Nervous System (PNS) neuronal cell types. NeuN protein distributions are restricted to neuronal nuclei, perikarya and some proximal neuronal processes in both fetal and adult brain. However, some neurons fail to be recognized by NeuN at all ages, such as INL retinal cells, Cajal-Retzius cells, Purkinje cells, inferior olivary and dentate nucleus neurons, and sympathetic ganglion cells.

NeuN antibody is widely used to label neurons since the vast majority of neurons are strongly positive. NeuN immunoreactivity becomes obvious as neurons mature, typically after they have down regulated expression of Doublecortin, a marker seen in the earliest stages of neuronal development.

Mouse Monoclonal Anti-Human
NeuN-A60



Brain stained with Anti-NeuN

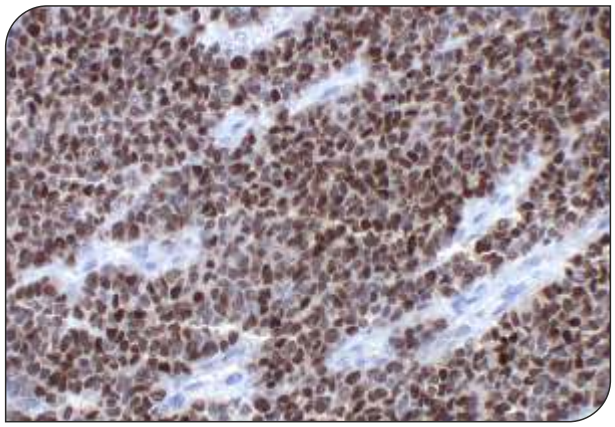
Clone	:	A60
Isotype	:	Mouse IgG1
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Brain

Catalog#	Catalog#	Catalog#
PM252-3ml (RTU)	PM252-6ml (RTU)	—
HAM252-3ml (RTU)	HAM252-6ml (RTU)	—
CM252-0.1ml (Conc)	CM252-0.5ml (Conc)	CM252-1ml (Conc)

C

NeuN antibody specifically recognizes the DNA binding, neuron specific protein NeuN, which is present in most CNS and PNS neuronal cell types of all vertebrates tested. NeuN protein distributions are apparently restricted to neuronal nuclei, perikarya and some proximal neuronal processes in both fetal and adult brain although, some neurons fail to be recognized by NeuN at all ages: INL retinal cells, Cajal-Retzius cells, Purkinje cells, inferior olivary and dentate nucleus neurons, and sympathetic ganglion cells are examples. Immunohistochemically detectable NeuN protein first appears at developmental timepoints that correspond with the withdrawal of the neuron from the cell cycle and/or with the initiation of terminal differentiation of the neuro. Immunoreactivity appears around E9.5 in the mouse neural tube and is extensive throughout the developing nervous system by E12.5. Strong nuclear staining suggests a nuclear regulatory protein function; however, no evidence currently exists as to whether the NeuN protein antigen has a function in the distal cytoplasm or whether it is merely synthesized there before being transported back into the nucleus. No difference between protein isolated from purified nuclei and whole brain extract on immunoblots has been found.

Mouse Monoclonal Anti-Human
NKX2.2-NX2/294



Malignant Round Cell Tumor stained with Anti-NKX2.2

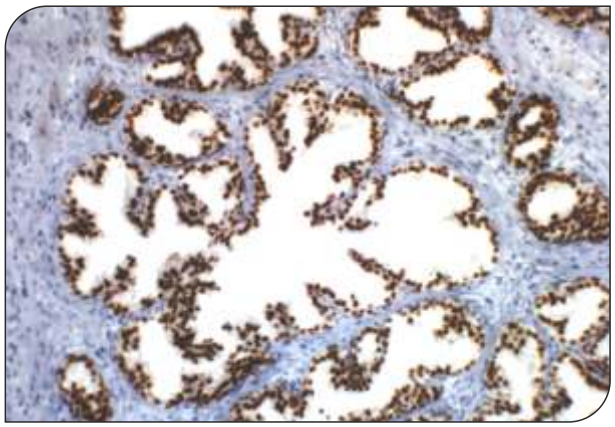
Clone	:	NX2/294
Isotype	:	Mouse IgG2bk
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Pancreas, Ewings Sarcoma, Malignant Round Cell Tumor

Catalog#	Catalog#	Catalog#
PM195-3ml (RTU)	PM195-6ml (RTU)	—
HAM195-3ml (RTU)	HAM195-6ml (RTU)	—
CM195-0.1ml (Conc)	CM195-0.5ml (Conc)	CM195-1ml (Conc)

TE

Expression of NKX2.2 has been found in neuroendocrine tumors of the gut, making it a potential marker for the study of gastrointestinal neuroendocrine tumors. More recently, NKX2.2 protein was identified as a target of EWS-FLI-1, the fusion protein specific to Ewing sarcoma, and was shown to be differentially upregulated in Ewing sarcoma on the basis of array based gene expression analysis. It acts as a valuable marker for Ewing sarcoma, with a sensitivity of 93% and a specificity of 89% and aids in the differential diagnosis of small round cell tumors.

Rabbit Monoclonal Anti-Human
NKX3.1-EP356



Prostate stained with Anti-NKX3.1

Clone	:	EP356
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	BPH, Prostate Adeno Ca

Catalog#	Catalog#	Catalog#
PR226-3ml (RTU)	PR226-6ml (RTU)	—
HAR226-3ml (RTU)	HAR226-6ml (RTU)	—
CR226-0.1ml (Conc)	CR226-0.5ml (Conc)	CR226-1ml (Conc)

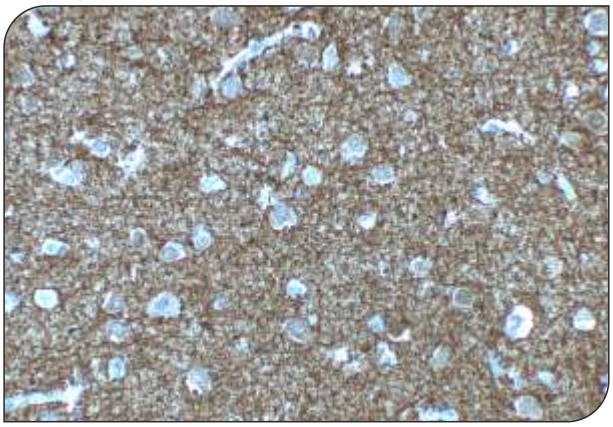
TE

NKX3.1 is a prostate-specific tumor suppressor homeodomain protein encoded by the NKX3.1 homeobox gene in chromosome 8p21. This protein is haploinsufficient and is frequently downregulated during early stages of carcinogenesis in premalignant lesions and prostatic intraepithelial neoplasia. Loss of heterozygosity is present in 60-80% of prostate tumors. NKX3.1 is expressed in the normal prostatic epithelium, predominantly localized to the nucleus. Primary and metastatic prostatic adenocarcinoma have lower staining intensity compared to the normal prostate. It has been established as a highly sensitive and specific tissue marker of prostatic adenocarcinoma. In a differential diagnostic setting, NKX3.1 is useful for differentiating prostatic from urothelial carcinoma, sensitivity ranged between 92-94%, along with a 100% specificity. A recent study also demonstrated NKX3.1 utility in identifying metastatic prostatic adenocarcinoma (98% sensitivity, 99% specificity). Combined in a panel with PSA and PSAP, all metastatic prostatic adenocarcinoma were positive for at least one marker.

Mouse Monoclonal Anti-Human
NSE gamma-ENO2/1462

C TE

Recognizes protein about 50kDa, which is identified as gamma enolase. Three isoenzymes of enolases are identified, alpha, beta and gamma. Alpha isoform is expressed in most tissues, whereas beta form is expressed predominantly in muscle tissue whereas gamma enolase is found only in nervous tissue. These isoform exist as both homodimers and heterodimers, and they play a role in converting phosphoglyceric acid to phosphenolpyruvic acid in the glycolytic pathway. NSE-gamma is a useful markers to identify peripheral nerves and tumors of neuroendocrine origins, such as pheochromocytomas. This antibody may be employed in combination with other markers such as Synaptophysin, Chromogranin A and Neurofilament.



Brain stained with Anti-NSE gamma

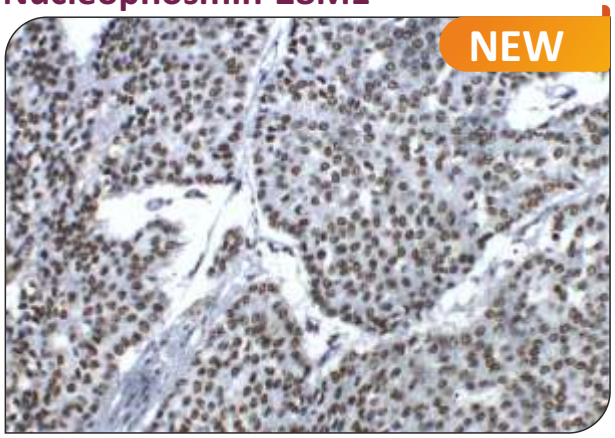
Clone	:	ENO2/1462
Isotype	:	Mouse IgG 2b
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Brain, Pancreas

Catalog#	Catalog#	Catalog#
PM225-3ml (RTU)	PM225-6ml (RTU)	—
HAM225-3ml (RTU)	HAM225-6ml (RTU)	—
CM225-0.1ml (Conc)	CM225-0.5ml (Conc)	CM225-1ml (Conc)

Mouse Monoclonal Anti-Human
Nucleophosmin-28M1

TE

Nucleophosmin, also known as Nucleolar phoshoprotein B23, Nucleolar protein NO38, or Numatrin, and encoded by the gene name NPM1 and NPM, is a major nucleolar phospoprotein that is mainly located within the nucleolar granular compartment, where ribosomes are assembled. Nucleophosmin is a multifunctional protein that is over expressed in actively proliferating cells and cancer cells. It is involved in cellular processes such as ribosome biogenesis, centrosome duplication, protein chaperoning, histone assembly, cell proliferation, and regulation of tumor suppressors p53/TP53 and ARF.



Breast Cancer stained with Anti-Nucleophosmin

Clone	:	28M1
Isotype	:	Mouse IgG 1k
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Breast Ca

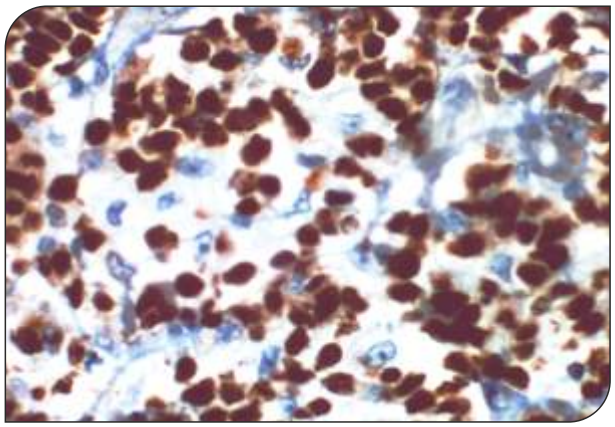
Catalog#	Catalog#	Catalog#
PM282-3ml (RTU)	PM282-6ml (RTU)	—
CM282-0.1ml (Conc)	CM282-0.5ml (Conc)	CM282-1ml (Conc)

E -EDTA BUFFER

TE -TRIS-EDTA BUFFER

C -CITRATE BUFFER

Rabbit Monoclonal Anti-Human
OCT2-EP284



Burkitts Lymphoma stained with Anti-OCT2

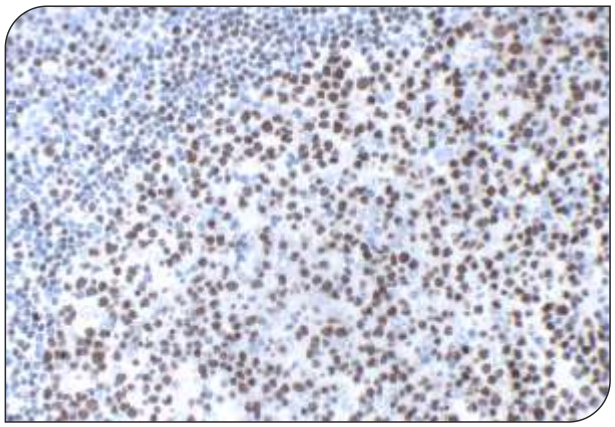
Clone	:	EP284
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Tonsil, Non-Hodgkin Lymphomas, Burkitts Lymphoma

Catalog#	Catalog#	Catalog#
PR245-3ml (RTU)	PR245-6ml (RTU)	—
CR245-0.1ml (Conc)	CR245-0.5ml (Conc)	CR245-1ml (Conc)

TE

Octamer transcription factor-2 (OCT2) possesses a leucine zipper domain and belongs to the POU family of transcription factors. It specifically binds to the octamer motif (5 ATTTCAT-3), activates immunoglobulin gene expression and regulates transcription in a number of tissues. OCT2 is important for the expression of B-cell specific genes, such as CD20 and CRISP 3. OCT2 is expressed in mature B cells, predominantly germinal center B-cells. Low expression of OCT2 has been found in immature B-cells, T-cells and myelomonocytic cells. OCT2 reactivity in epithelial cells and neuronal cells has also been reported. The OCT2 antibody labels various B-cell lymphomas with strong expression in germinal center derived lymphomas. In a study on Hodgkin's lymphoma (HL), OCT2 positivity has been observed in 15 out of 15 lymphocyte predominance HLs, but none of the 29 classic HLs.

Rabbit Monoclonal Anti-Human
OCT2-EP115



Follicular Lymphoma stained with Anti-OCT2

Clone	:	EP115
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus and/or Cytoplasm
Control	:	Tonsil, Non-Hodgkin Lymphomas, Follicular Lymphoma

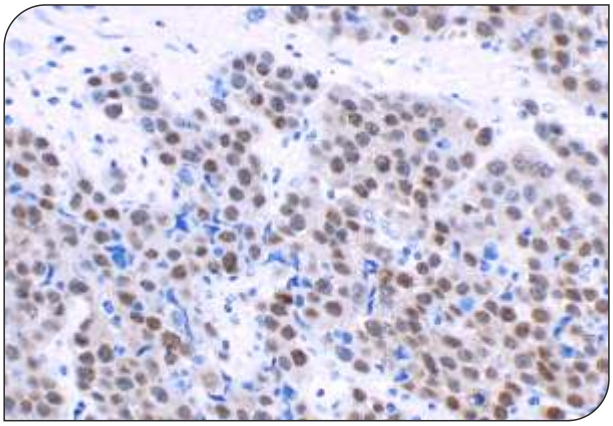
Catalog#	Catalog#	Catalog#
PR207-3ml (RTU)	PR207-6ml (RTU)	—
CR207-0.1ml (Conc)	CR207-0.5ml (Conc)	CR207-1ml (Conc)

TE

Octamer transcription factor 2 (OCT2) possesses a leucine zipper domain and belongs to the POU family of transcription factors. It specifically binds to the octamer motif (5 ATTTCAT-3), activates immunoglobulin gene expression and regulates transcription in a number of tissues. OCT2 is important for the expression of B-cell specific genes, such as CD20 and CRISP 3. OCT2 is expressed in mature B-cells, predominantly germinal center B-cells. Low expression of OCT2 has been found in immature B-cells, T-cells and myelomonocytic cells. OCT2 reactivity in epithelial cells and neuronal cells has also been reported.

The OCT2 antibody labels various B-cell lymphomas with strong expression in germinal center-derived lymphomas. In a study on Hodgkin's lymphoma (HL), OCT2 positivity has been observed in 15 out of 15 lymphocyte predominance HLs, but none of the 29 classic HLs.

Rabbit Monoclonal Anti-Human
OCT4-EP143



Seminoma stained with Anti-OCT4

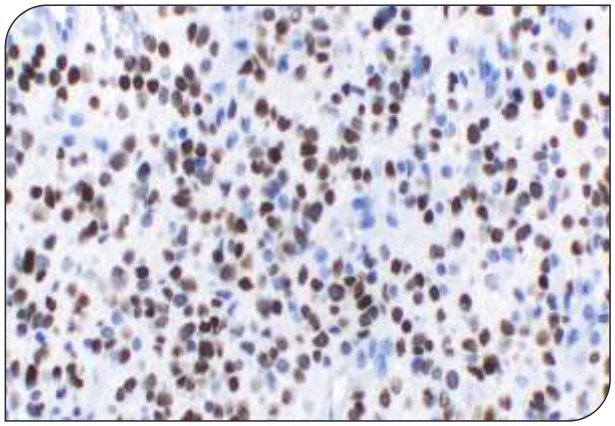
Clone	:	EP143
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Seminoma

Catalog#	Catalog#	Catalog#
PR061-3ml (RTU)	PR061-6ml (RTU)	—
HAR061-3ml (RTU)	HAR061-6ml (RTU)	—
CR061-0.1ml (Conc)	CR061-0.5ml (Conc)	CR061-1ml (Conc)

TE

OCT4, also known as OTF3 or POU5F1, is a member of the POU family of transcription factors, involved in the regulation of pluripotency during normal development and is detectable in embryonic stem and germ cells. It can specifically bind to the octamer motif (5'-ATTTCAT-3'), and it is critical for the self renewal of embryonic stem cells. Overall, OCT4 is a key regulator of self renewal in embryonic stem cells; its expression is potentially correlated with tumorigenesis and can affect some aspects of tumor behavior such as tumor recurrence or resistance to therapies. OCT4 is expressed in undifferentiated pluriopotency cells, and germ cells in ovary and OCT4 is a sensitive and specific marker for germ cell tumors.

Rabbit Monoclonal Anti-Human
OLIG2-EP112



High Grade Glioma stained with Anti-OLIG2

Clone	:	EP112
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Oligodendroglioma, Brain

Catalog#	Catalog#	Catalog#
PR289-3ml (RTU)	PR289-6ml (RTU)	—
HAR289-3ml (RTU)	HAR289-6ml (RTU)	—
CR289-0.1ml (Conc)	CR289-0.5ml (Conc)	CR289-1ml (Conc)

TE

Oligodendrocyte transcription factor 2 (OLIG2) is a transcription factor with basic helixloophelix (bHLH) domains that have fundamental roles in neuronal and glial production. It is required for oligodendrocyte and motor neuron specification in the spinal cord, as well as for the development of somatic motor neurons in the hindbrain. As a result, it plays a critical role in motor neuron and oligodendrocyte fate specification during development. It cooperates with OLIG1 to establish the pMN domain of the embryonic neural tube. The expression of OLIG2 is normally restricted to neural tissues.

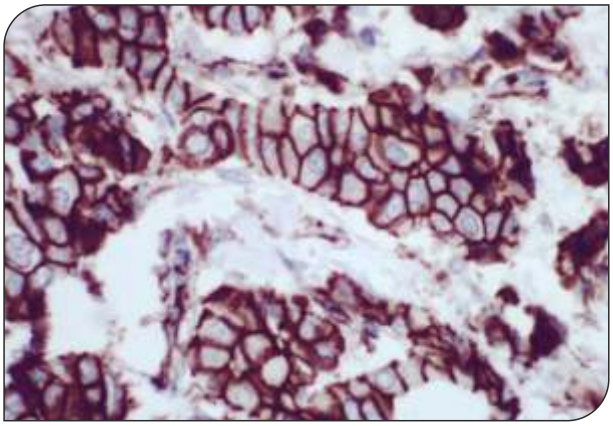
C • CITRATE BUFFER
TE • TRIS-EDTA BUFFER
E • EDTA BUFFER

E -EDTA BUFFER

TE -TRIS-EDTA BUFFER

C -CITRATE BUFFER

Rabbit Monoclonal Anti-Human
p120 Catenin-EP66



Breast stained with Anti-p120 Catenin

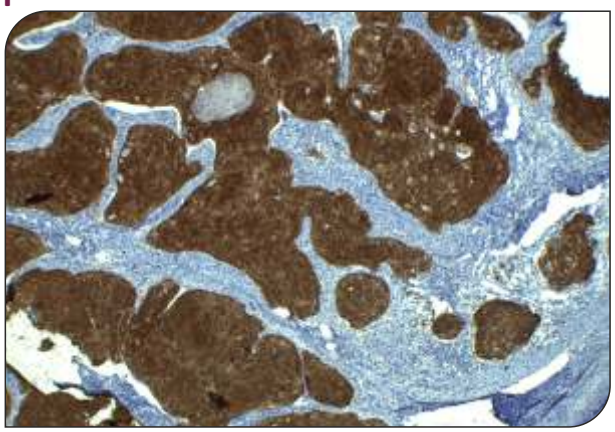
Clone	:	EP66
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Membrane or Cytoplasm
Control	:	Breast Lobular Ca, Breast

Catalog#	Catalog#	Catalog#
PR062-3ml (RTU)	PR062-6ml (RTU)	—
HAR062-3ml (RTU)	HAR062-6ml (RTU)	—
CR062-0.1ml (Conc)	CR062-0.5ml (Conc)	CR062-1ml (Conc)

TE

Catenins are proteins that are linked to the cytoplasmic domain of transmembrane cadherins. p120 Catenin is a member of this Armadillo gene family of junctional plaque proteins. The association of catenins to cadherins produces a complex which is linked to the actin filament network, and which seems to be important for cadherins cell adhesion properties. Cytoplasmic accumulation of p120 Catenin has been observed in lung cancer, pancreatic cancer, gastric cancer, and colon cancers and is associated with poor progress in colon cancer patients. In breast lobular neoplasia, p120 Catenin shows a diffuse cytoplasmic immunostaining pattern, while breast ductal neoplasia retains the membrane immunostaining pattern.

Mouse Monoclonal Anti-Human
p16INK4A-JC8



SCC of Cervix stained with Anti-p16INK4A

Clone	:	JC8
Isotype	:	Mouse IgG2a
Reactivity	:	Human, FFPE
Localization	:	Nucleus and Cytoplasm
Control	:	Cervical Ca, SCC of Cervix

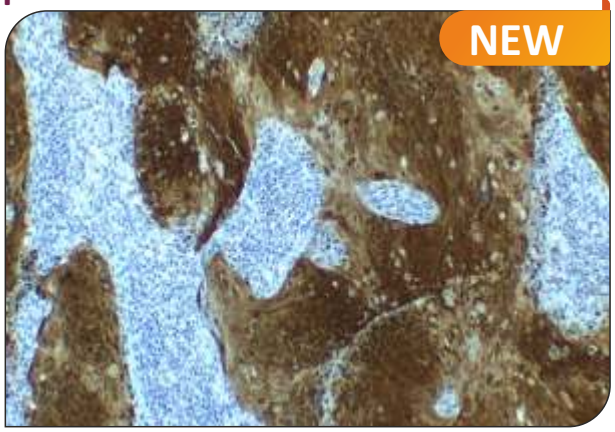
Catalog#	Catalog#	Catalog#
PM304-3ml (RTU)	PM304-6ml (RTU)	—
HAM304-3ml (RTU)	HAM304-6ml (RTU)	—
CM304-0.1ml (Conc)	CM304-0.5ml (Conc)	CM304-1ml (Conc)

TE

The progression of cells through the cell cycle is regulated by a family of protein kinases known as cyclin dependent kinases (Cdks). The sequential activation of individual members of this family and their consequent phosphorylation of critical substrates promotes orderly progression through the cell cycle. The cyclins function as differentially expressed positive regulators of Cdks. Negative regulators of the cycle include the p53 inducible protein p21 (also designated WAF1 or Cip1), Kip1 p27 and p16. The complexes formed by Cdk4 and the D type cyclins have been strongly implicated in the control of cell proliferation during the G1 phase.

It has been shown that p16 binds to Cdk4 and inhibits the catalytic activity of the Cdk4/cyclin D complex. Moreover, the gene encoding p16 exhibits a high frequency of homozygous deletions and point mutations in established human tumor cell lines.

Rabbit Monoclonal Anti-Human
p16INK4a-PRM121



SCC of Cervix stained with Anti-p16INK4a

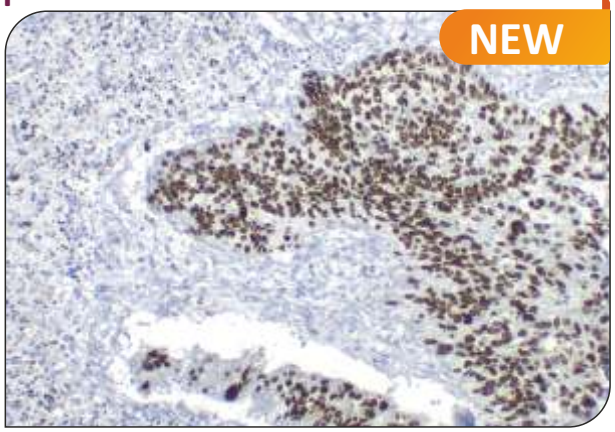
Clone	:	PRM121
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus and Cytoplasm
Control	:	Cervical Ca, SCC of Cervix

Catalog#	Catalog#	Catalog#
PR322-3ml (RTU)	PR322-6ml (RTU)	—
HAR322-3ml (RTU)	HAR322-6ml (RTU)	—
CR322-0.1ml (Conc)	CR322-0.5ml (Conc)	CR322-1ml (Conc)

TE

p16 is a tumor suppressor gene. p16 is an important gene in regulating the cell cycle. p16INK4a regulates the cell cycle by binding and deactivating various cyclin-CDK complexes. p16 is a G1/S-cell cycle regulator that is involved in the pathway that converges in the tumor suppressor protein Rb.The division cycle of eukaryotic cells is regulated by a family of protein kinases known as the cyclin-dependent kinases (CDKs). The sequential activation of individual members of this family and their consequent phosphorylation of critical substrates promotes orderly progression through the cell cycle. It has been reported that p16 binds to CDK4 and inhibits the catalytic activity of the CDK4/cyclin D enzymes. p16 seems to act in a regulatory feedback circuit with CDK4, D-type cyclins and retinoblastoma protein. The INK4 (inhibitor of cyclin-dependent kinase 4) family consists of four tumor-suppressor proteins p15(INK4B), p16(INK4A), p18(INK4C), and p19(INK4D). While their sequences and structures are highly homologous, they show appreciable differences in conformational flexibility, stability, and aggregation tendency. Cell cycle arrest at the G1 checkpoint allows completion of critical macromolecular events prior to S phase. Regulators of the G1 checkpoint include an inhibitor of cyclin-dependent kinase, p16INK4 two tumor-suppressor proteins, p53 and RB and cyclin D1. p16INK4 is a tumor-suppressor protein and that genetic and epigenetic abnormalities in genes controlling the G1 checkpoint can lead to both escape from senescence and cancer formation.

Rabbit Monoclonal Anti-Human
p40-PRM115



Lung SCC stained with Anti-p40

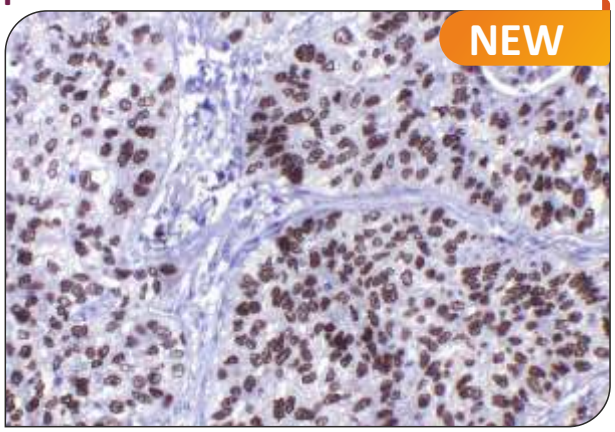
Clone	:	PRM115
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Tonsil, Lung Squamous Cell Ca

Catalog#	Catalog#	Catalog#
PR316-3ml (RTU)	PR316-6ml (RTU)	—
HAR316-3ml (RTU)	HAR316-6ml (RTU)	—
CR316-0.1ml (Conc)	CR316-0.5ml (Conc)	CR316-1ml (Conc)

TE

The rabbit monoclonal antibody p40 recognizes an epitope unique to the p40 protein and may have applications in cases where p63 has traditionally been used. p63 recognizes both the p63 and p40 proteins. As a result, p63 suffers from specificity limitations due to reactivity in a subset of lung adenocarcinomas (ADC). In contrast, p40 is selectively expressed in lung Squamous cell carcinoma (SqCC), offering an opportunity for improved specificity. p40 antibody recognizes an epitope unique to p40, which may result in diminished reactivity in lung ADC and increased specificity. Studies have supported routine use of p40 as an alternative for p63.

Rabbit Monoclonal Anti-Human
p40-deltaNPP



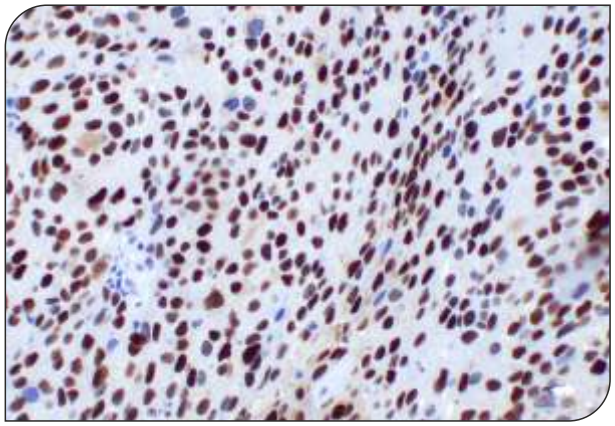
Lung SCC stained with Anti-p40

Clone	:	deltaNPP
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Lung Squamous Cell Ca

Catalog#	Catalog#	Catalog#
PR308-3ml (RTU)	PR308-6ml (RTU)	—
HAR308-3ml (RTU)	HAR308-6ml (RTU)	—
CR308-0.1ml (Conc)	CR308-0.5ml (Conc)	CR308-1ml (Conc)

TE p40 antibody (antibody recognizing ΔNp63 only) is an isoform of p63, is thought to function as a stem cell factor, responsible for maintaining cells in an uncommitted state with regenerative potential a role that may be recapitulated in tumors derived from these cells. p40 is normally expressed in the basal or progenitor cell layer of stratified epithelia (Eg. squamous, urothelial, bronchial), basal cells of some glandular epithelia (Eg. prostate), as well as myoepithelial cells of breast and salivary glands, trophoblasts and thymic epithelial cells. In tumor tissues, p40 expression is specific for squamous cell carcinoma. p40 is equivalent to p63 in sensitivity for lung squamous cell carcinoma, but it is markedly superior to p63 in specificity, which eliminates a potential pitfall of misinterpreting a p63 positive adenocarcinoma or unsuspected lymphoma as squamous cell carcinoma. p40 appears to be a more reliable marker for squamous cell carcinoma.

Mouse Monoclonal Anti-Human
p53-BP-53-12



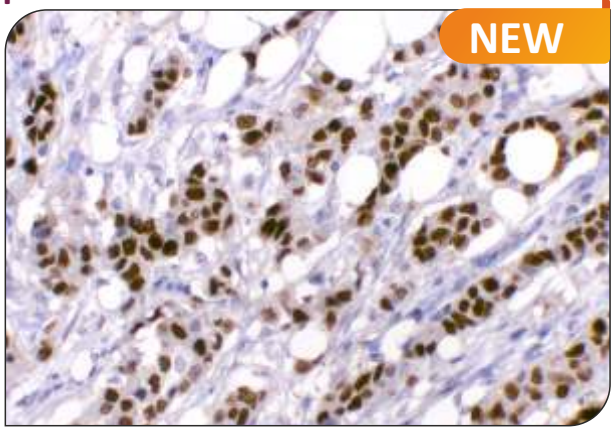
Urothelial Ca stained with Anti-p53

Clone	:	BP-53-12
Isotype	:	Mouse IgG2a
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Ovarian Ca, Breast Ca, Colon Ca, Urothelial Ca

Catalog#	Catalog#	Catalog#
PM101-3ml (RTU)	PM101-6ml (RTU)	—
HAM101-3ml (RTU)	HAM101-6ml (RTU)	—
CM101-0.1ml (Conc)	CM101-0.5ml (Conc)	CM101-1ml (Conc)

E p53 acts as both a tumor suppressor and transcription factor that, upon activation by DNA damage and other cellular stress signals, leads to the transcription of genes triggering cell cycle arrest, apoptosis, and DNA repair. p53 is overexpressed in over 50% of human cancers. Positive staining of p53 detected by immunohistochemistry has been observed in colon cancer, breast cancer, lung cancer, prostate cancer and ovary cancer.

Rabbit Monoclonal Anti-Human
p53-PRM129



Breast Ca stained with Anti-p53

Clone	:	PRM129
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Lung, Breast Ca, Prostate, Ovarian Ca

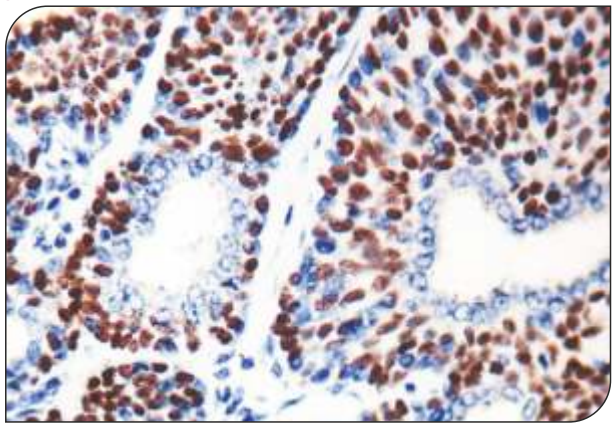
Catalog#	Catalog#	Catalog#
PR332-3ml (RTU)	PR332-6ml (RTU)	—
HAR332-3ml (RTU)	HAR332-6ml (RTU)	—
CR332-0.1ml (Conc)	CR332-0.5ml (Conc)	CR332-1ml (Conc)

TE

p53 (also known as tumor protein 53 [TP53]) is a transcription factor that regulates the cell cycle and, hence, functions as a tumor suppressor. p53 has been described as "the guardian of the genome", referring to its role in conserving stability by preventing genome mutation. p53 has many anti-cancer mechanisms. It can activate DNA repair proteins when DNA has sustained damage; it can also hold the cell cycle at the G1/S regulation point on DNA damage recognition. It can initiate apoptosis, programmed cell death, if DNA damage proves to be irreparable. p53 is central to many of the cell's anti-cancer mechanisms. It can induce growth arrest, apoptosis and cell senescence.

Mutations involving p53 antibody expression have been found in a wide variety of malignant tumors, including Breast, Ovarian, Bladder, Colon, Lung, and Melanoma.

Mouse Monoclonal Anti-Human
p63-4A4



Prostate stained with Anti-p63

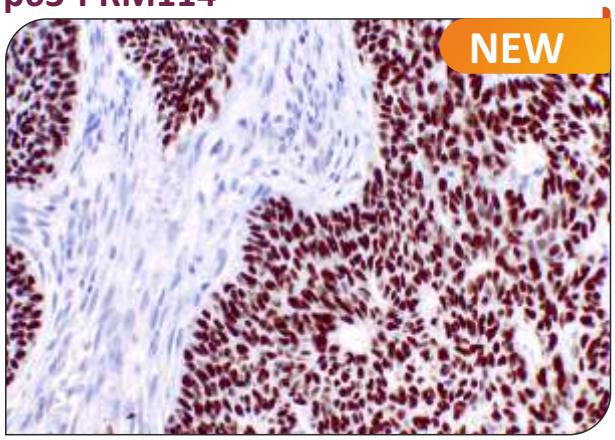
Clone	:	4A4
Isotype	:	Mouse IgG2a/k
Reactivity	:	Human FFPE
Localization	:	Nucleus
Control	:	BPH, Squamous Cell Ca

Catalog#	Catalog#	Catalog#
PM105-3ml (RTU)	PM105-6ml (RTU)	—
HAM105-3ml (RTU)	HAM105-6ml (RTU)	—
CM105-0.1ml (Conc)	CM105-0.5ml (Conc)	CM105-1ml (Conc)

TE

The p63 protein is a member of the p53 family, which also includes p73. The protein isotypes TAp63a, TAp63b and TAp63g contain the N-terminal transactivation (TA) domain, whereas the other three isotypes DNp63a, DNp63b, and DNp63g, lack this domain, and when present in sufficient concentration act in a dominant negative manner with respect to wild type p63 and p53 protein. The predominant localization of p63 protein is in the basal layer of stratified squamous and transitional epithelia. These basal cells act as the progenitors of the suprabasal cells, which undergo differentiation and cell death in regenerative epithelia. p63 is detected in prostate basal cells in normal prostate, however, it is negative in malignant tumors of the prostate gland. Thus p63 is useful as a differential marker for benign and malignant tumors of prostate gland and can be used in a panel of antibodies such as HMW CK (34ßE12), PSA and PSAP.

Rabbit Monoclonal Anti-Human
p63-PRM114



BCC stained with Anti-p63

Clone	:	PRM114
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	BPH, Breast Ca, BCC

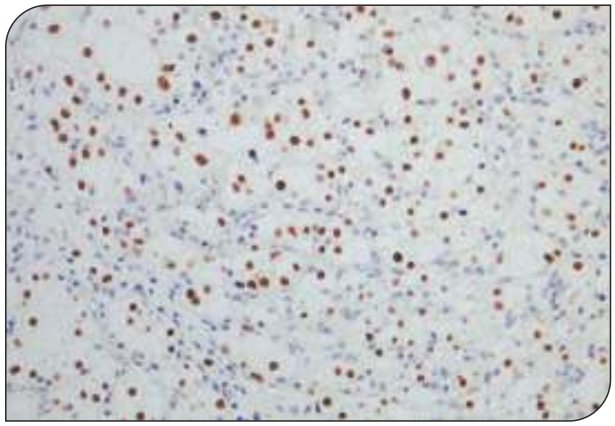
Catalog#	Catalog#	Catalog#
PR315-3ml (RTU)	PR315-6ml (RTU)	—
HAR315-3ml (RTU)	HAR315-6ml (RTU)	—
CR315-0.1ml (Conc)	CR315-0.5ml (Conc)	CR315-1ml (Conc)

TE

p63 is a rabbit monoclonal antibody for immuno-histochemistry from PathnSitu. In addition to p53, mammalian cells contain two homologous genes, p63 and p73. These genes give rise to the expression of proteins that are highly similar to p53 in structure and function. In particular, p63 and p73 proteins can induce p53-responsive genes and elicit programmed cell death. p73 and p63 are more important during development and differentiation. In particular, p63 appears to be primarily implicated in epithelial development.

p63 antibody to human p63 protein labels an epitope common to all six p63 isotypes (TAp63a, TAp63b, TAp63g, DNp63a, DNp63b, DNp63g). p63 labels the nuclei of myoepithelial cells in the prostate gland as well as breast tissue, making it useful in differentiating benign vs. malignant prostate lesions and breast lesions.

Rabbit Monoclonal Anti-Human
PAX2-EP235



RCC stained with Anti-PAX2

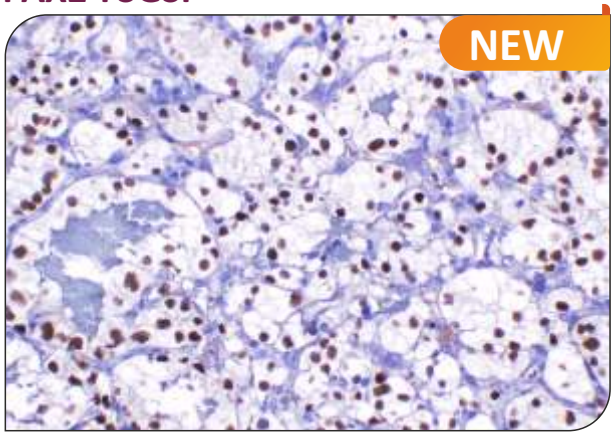
Clone	:	EP235
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Kidney, RCC

Catalog#	Catalog#	Catalog#
PR190-3ml (RTU)	PR190-6ml (RTU)	—
CR190-0.1ml (Conc)	CR190-0.5ml (Conc)	CR190-1ml (Conc)

TE

PAX2 is a member of the paired box family of transcription factors, which is required for development and proliferation of the kidney, brain, and mullerian organs. PAX2 genes contain a highly conserved DNA sequence within the paired box region, which encodes a DNA binding domain, enabling PAX proteins to bind the promoters of specific genes to transcriptionally regulate their expression. PAX2 is specifically expressed in the developing central nervous system, eye, ear, and urogenital tract, and is essential for the development of these organs. In normal adult tissues PAX2 was mainly detected in the urogenital system, including kidney, ureteric epithelium, fallopian tube epithelium, ovary and uterus. In tumors, PAX2 has been detected in renal cell carcinomas, Wilms' tumors, nephrogenic adenomas and papillary serous carcinoma of the ovary. PAX2 has been used as a marker for the identification of renal cell carcinoma and ovarian carcinoma by immunohistochemistry.

Rabbit Monoclonal Anti-Human
PAX2-FSGSP



Clear All RCC stained with Anti-PAX2

Clone	:	FSGSP
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Clear All RCC

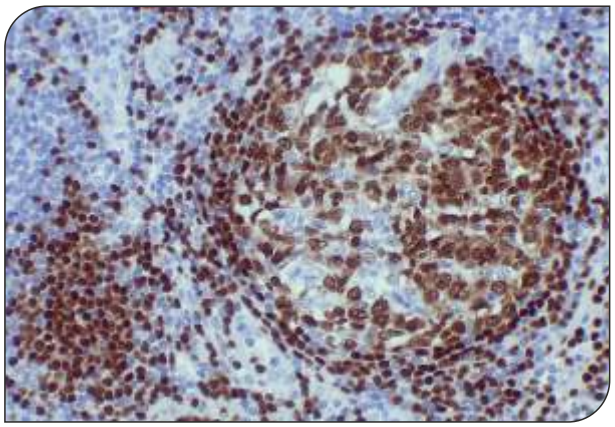
Catalog#	Catalog#	Catalog#
PR361-3ml (RTU)	PR361-6ml (RTU)	—
HAR361-3ml (RTU)	HAR361-6ml (RTU)	—
CR361-0.1ml (Conc)	CR361-0.5ml (Conc)	CR361-1ml (Conc)

TE

PAX-2 is a member of the PAX family of transcription factors that, together with PAX-8, is involved in the regulation of the organogenesis of the kidney and the Müllerian system.Among the non-neoplastic tissue, PAX-2 was expressed in glomerular parietal epithelial cells, renal collecting duct cells, atrophic renal tubular cells, epithelial cells of ovarian surface, fallopian tube, endocervix, endometrium. Among the primary neoplasms, PAX-2 was mainly noted in renal cell carcinoma, carcinomas of Müllerian origin, nephrogenic adenomas.Recent investigations have indicated that PAX-2 could serve as a useful immunohistochemical marker that can assist in the diagnosis of epithelial tumors of the kidney, as well as some gynecologic (Müllerian) neoplasms.

Rabbit Monoclonal Anti-Human
PAX5-EP156

TE C



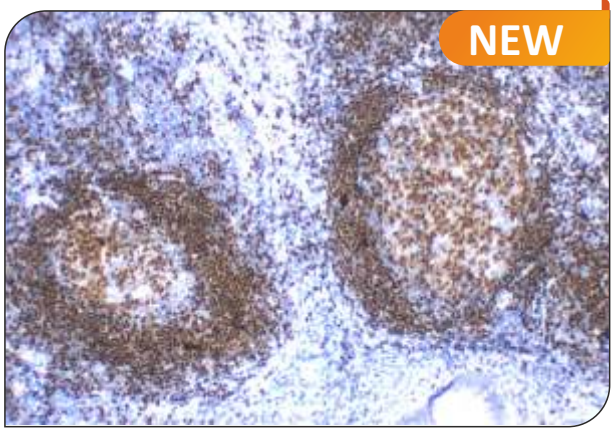
Tonsil stained with Anti-PAX5

Clone	:	EP156
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Tonsil, Appendix

Catalog#	Catalog#	Catalog#
PR064-3ml (RTU)	PR064-6ml (RTU)	—
HAR064-3ml (RTU)	HAR064-6ml (RTU)	—
CR064-0.1ml (Conc)	CR064-0.5ml (Conc)	CR064-1ml (Conc)

PAX5 is a B-cell lineage specific activator protein (BSAP) that is essential for maintaining the identity and function of mature B-cells during late B-lymphopoiesis. It also plays a role in neural development and spermatogenesis. PAX5 is expressed in pro-, pre-, and mature B-cells, and it is expressed in the vast majority of B-cell malignancies. Anti-PAX5 is a specific marker for the B-cell lineage. PAX5 is thus useful for a panel of antibodies for the identification of cellular origin of un differentiated tumors. The expression of PAX5 in endocrine tumors has been shown to be high in Merkel cell carcinoma and small cell carcinoma, but not carcinoid tumor. PAX5 is also a marker for neuronendocrine carcinomas.

Rabbit Monoclonal Anti-Human
PAX5-BCMP



Appendix stained with Anti-PAX5

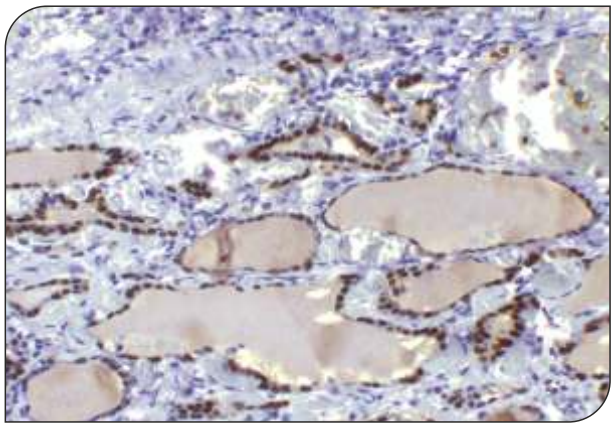
Clone	:	BCMP
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Tonsil, Hodgkin's Lymphoma, Appendix

Catalog#	Catalog#	Catalog#
PR348-3ml (RTU)	PR348-6ml (RTU)	—
HAR348-3ml (RTU)	HAR348-6ml (RTU)	—
CR348-0.1ml (Conc)	CR348-0.5ml (Conc)	CR348-1ml (Conc)

TE

Pax genes are a family of developmental control genes that encode nuclear transcription factors and have been implicated in the control of mammalian development.PAX-5 is a marker for B-cells, including B-lymphoblastic neoplasms and maturation stage. It is found in most cases of mature and precursor B-cell non-Hodgkin lymphomas/leukemias. In approximately 97% of cases of classic Hodgkin lymphoma, Reed-Sternberg cells express PAX-5. The antibody is a useful tool for the identification of pro, pre, and mature B cells and for classification of lymphomas and subclassification of classic Hodgkin's lymphoma and anaplastic large cell lymphoma of the T and null-cell type.

Rabbit Monoclonal Anti-Human
PAX8-EP331



Thyroid stained with Anti-PAX8

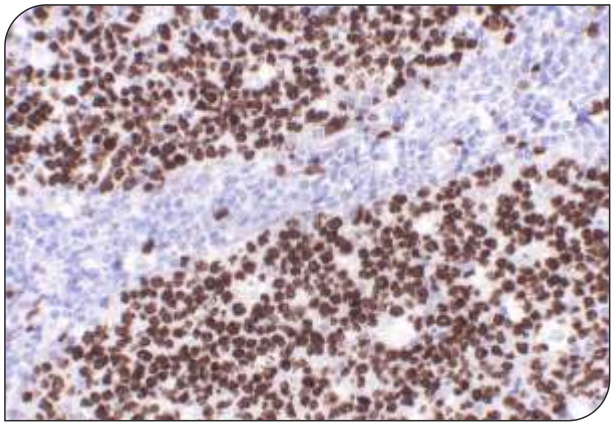
Clone	:	EP331
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Papillary Thyroid Ca, Ovarian Ca, Thyroid

Catalog#	Catalog#	Catalog#
PR276-3ml (RTU)	PR276-6ml (RTU)	—
HAR276-3ml (RTU)	HAR276-6ml (RTU)	—
CR276-0.1ml (Conc)	CR276-0.5ml (Conc)	CR276-1ml (Conc)

E

Paired box protein PAX8 is a member of the PAX family of transcription factors. It is essential of organogenesis during embryonic development of the kidney, thyroid and paramesonephric ducts, giving rise to urogenital organs including the seminal vesicles, vas deferens, ureter, uterus, and fallopian tubes. Although PAX8 is crucial for organogenesis, sustained expression in the normal kidney, thyroid, breast, seminal vesicles, ovarian, cervical and endometrial epithelia suggest a role for homeostatic control of mature tissues. Immunohistochemical staining revealed almost exclusive nuclear localization, with low or negligible cytoplasmic expression. Due to the restrictive expression in normal tissues, Pax8 has been suggested to be a sensitive and specific marker for both primary and metastatic tumors derived from the above mentioned organs and tissues.

Rabbit Monoclonal Anti-Human
PCNA-EP91



Tonsil stained with Anti-PCNA

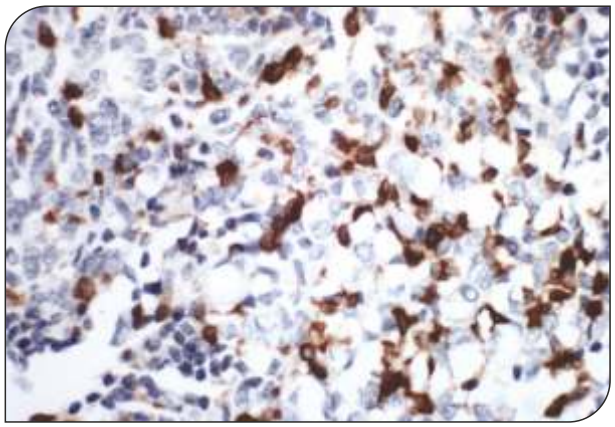
Clone	:	EP91
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Tonsil, Colon Ca

Catalog#	Catalog#	Catalog#
PR065-3ml (RTU)	PR065-6ml (RTU)	—
HAR065-3ml (RTU)	HAR065-6ml (RTU)	—
CR065-0.1ml (Conc)	CR065-0.5ml (Conc)	CR065 -1ml (Conc)

TE

Proliferating cell nuclear antigen (PCNA) is a DNA polymerase accessory factor that is required for DNA replication during S phase of the cell cycle and for resynthesis during nucleotide excision repair of damaged DNA. The PCNA antibody detects proliferating cells in both normal and tumor cells. Anti-PCNA labeling index has been shown to be associated with tumor prognosis.

Rabbit Monoclonal Anti-Human
PD1-EP239



Tonsil stained with Anti-PD1

Clone	:	EP239
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm and Membrane
Control	:	Tonsil, RCC

Catalog#	Catalog#	Catalog#
PR198-3ml (RTU)	PR198-6ml (RTU)	—
HAR198-3ml (RTU)	HAR198-6ml (RTU)	—
CR198-0.1ml (Conc)	CR198-0.5ml (Conc)	CR198-1ml (Conc)

TE

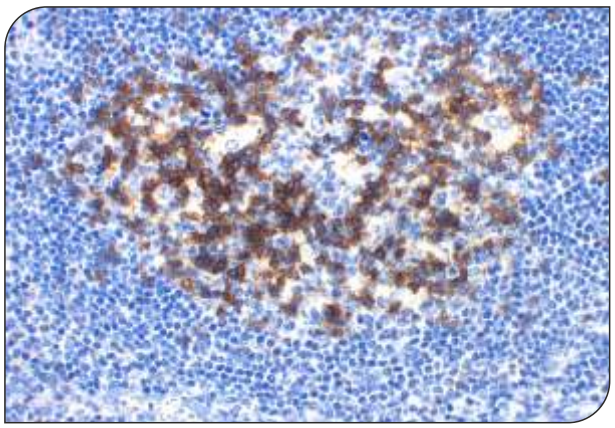
Programmed death-1 (PD-1), also known as CD279, is a receptor for PDL1 and PDL2. PD1 plays a crucial role in regulating peripheral tolerance and tumor immunity. PD-1 is expressed mainly on a subset of activated T-cells, B-cells and myeloid cells. Increased expression of PD-1 has been reported to be associated with poor prognosis in hepatocellular carcinoma (HCC) and renal cell carcinoma. PD1 positivity has been found in angioimmunoblastic lymphoma, but not other subtypes of T-cell and B-cell non-Hodgkin lymphoma and classic Hodgkin lymphoma. PD-1 is a useful marker for angioimmunoblastic lymphoma.

E -EDTA BUFFER

TE -TRIS-EDTA BUFFER

C -CITRATE BUFFER

Mouse Monoclonal Anti-Human
PD1/CD279-PDCD1/922



Tonsil stained with Anti-PD1/CD279

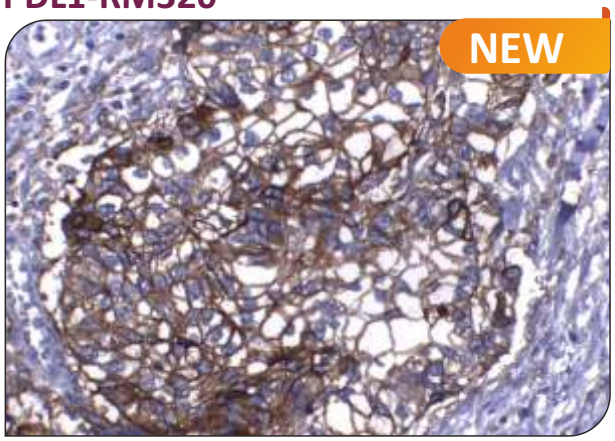
Clone	:	PDCD1/922
Isotype	:	Mouse IgG1
Reactivity	:	Human, FFPE
Localization	:	Membrane and Cytoplasm
Control	:	Tonsil

Catalog#	Catalog#	Catalog#
PM208-3ml (RTU)	PM208-6ml (RTU)	—
HAM208-3ml (RTU)	HAM208-6ml (RTU)	—
CM208-0.1ml (Conc)	CM208-0.5ml (Conc)	CM208-1ml (Conc)

TE

PDCD-1 (programmed cell death-1 protein), also designated CD279, is a type I transmembrane receptor and a member of the immunoglobin gene superfamily. It is expressed on activated T-cells, B-cells, and myeloid cells. Anti-PDCD-1 is a marker of angioimmunoblastic lymphoma and suggests a unique cell of origin for this neoplasm. Unlike CD10 and BCL6, PDCD-1 is expressed by few B-cells, so anti-PDCD-1 may be a more specific and useful diagnostic marker in angioimmunoblastic lymphoma. In addition, PDCD-1 expression provides evidence that angioimmunoblastic lymphoma is a neoplasm derived from germinal center associated T-cells.

Rabbit Monoclonal Anti-Human
PDL1-RM320



Lung SCC stained with Anti-PDL1

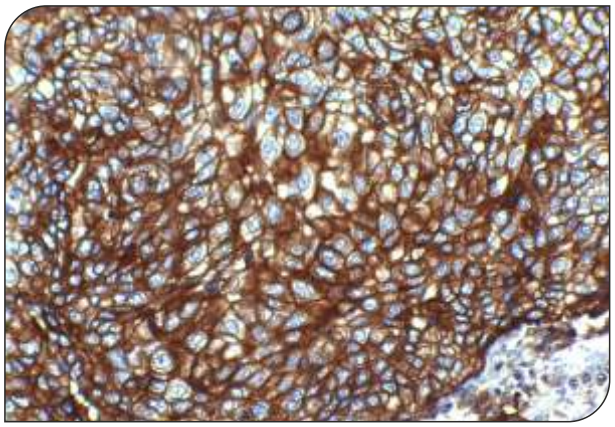
Clone	:	RM320
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Membrane
Control	:	Lung SCC, Placenta

Catalog#	Catalog#	Catalog#
PR311-3ml (RTU)	PR311-6ml (RTU)	—
HAR311-3ml (RTU)	HAR311-6ml (RTU)	—
CR311-0.1ml (Conc)	CR311-0.5ml (Conc)	CR311-1ml (Conc)

TE

Programmed cell death ligand 1 (PD-L1) also known as cluster of differentiation 274 (CD274) is a type 1 transmembrane protein involved in the regulation of cellular and humoral immune responses. The interaction of PD-L1 with its receptor PD-1 provides both stimulatory and inhibitory signals in regulating T cell activation and tolerance during pregnancy tissue allografts, autoimmune disease and malignant transformation.

Rabbit Monoclonal Anti-Human
PDL1-B7H1P



Lung SCC stained with Anti-PDL1

Clone	:	B7H1P
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Membrane
Control	:	Lung SCC, Placenta

Catalog#	Catalog#	Catalog#
PR303-3ml (RTU)	PR303-6ml (RTU)	—
HAR303-3ml (RTU)	HAR303-6ml (RTU)	—
CR303-0.1ml (Conc)	CR303-0.5ml (Conc)	CR303-1ml (Conc)

TE

Programmed cell death ligand 1 (PD-L1) also known as cluster of differentiation 274 (CD274) or B7 homolog 1 (B7-H1) is a type 1 transmembrane protein involved in the regulation of cellular and humoral immune responses. The interaction of PD-L1 with its receptor PD-1 provides both stimulatory and inhibitory signals in regulating T-cell activation and tolerance during pregnancy tissue allografts, autoimmune disease and malignant transformation.

Mouse Monoclonal Anti-Human
Perforin-1-PRF1/2470

Lymph Node stained with Anti-Perforin-1

Clone	:	PRF1/2470
Isotype	:	Mouse IgG2c,k
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Spleen, Tonsil, Lymph Node, Endometrial Stromal Tumor

Catalog#	Catalog#	Catalog#
PM302-3ml (RTU)	PM302-6ml (RTU)	—
HAM302-3ml (RTU)	HAM302-6ml (RTU)	—
CM302-0.1ml (Conc)	CM302-0.5ml (Conc)	CM302-1ml (Conc)

TE

Perforin is a pore forming protein that leads to osmotic lysis of the target cells and subsequently enables granzymes to enter the target cells and activate apoptosis. Perforin has structural and functional similarities to complement component 9 (C9). Like C9, this protein creates transmembrane tubules and is capable of lysing nonspecifically a variety of target cells. It is one of the main cytolytic proteins of cytolytic granules, and is known to be a key effector molecule for T-cell and natural killer cell mediated cytolysis. Defects in this gene cause familial hemophagocytic lymphohistiocytosis type 2 (HPLH2), a rare and lethal autosomal recessive disorder of early childhood. The expression of perforin is reportedly upregulated in activated CD8+ T-cells, natural killer cells and some CD4+ T-cells.

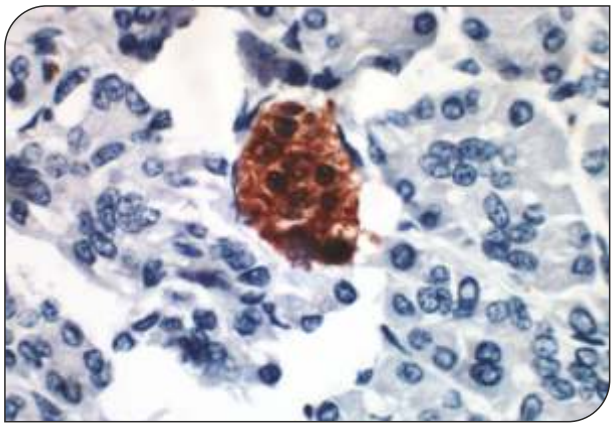
E - EDTA BUFFER

TE - TRIS-EDTA BUFFER

C - CITRATE BUFFER

Rabbit Polyclonal Anti-Human

PGP9.5-Polyclonal



Pancreas stained with Anti-PGP9.5

Clone	:	Polyclonal
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Brain, Colon, Pancreas, Astrocytoma Shwannoma

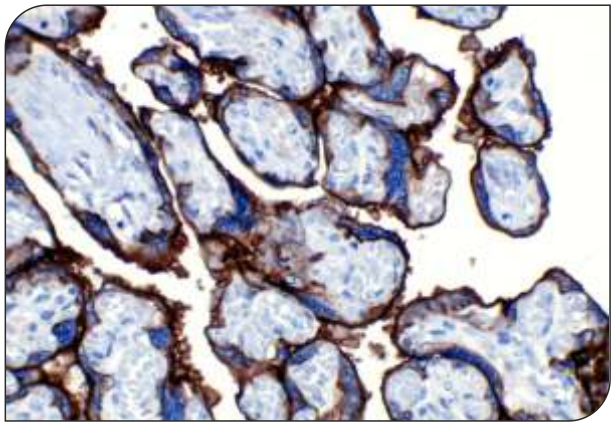
Catalog#	Catalog#	Catalog#
PP181-3ml (RTU)	PP181-6ml (RTU)	—
CP181-0.1ml (Conc)	CP181-0.5ml (Conc)	CP181-1ml (Conc)

C

Protein gene product 9.5 (PGP 9.5), also known as ubiquitin carboxyl-terminal hydrolase-1 (UCH-L1), is a 27-kDa protein originally isolated from whole brain extracts. Although PGP9.5 expression in normal tissues was originally felt to be strictly confined to neurons and neuroendocrine cells, it has been subsequently documented in distal renal tubular epithelium, spermatogonia, Leydig cells, oocytes, melanocytes, prostatic secretory epithelium, ejaculatory duct cells, epididymis, mammary epithelial cells, Merkel cells and dermal fibroblasts. LK PGP 9.5 has been demonstrated immunostaining of a plethora of different mesenchymal neoplasms with this antibody.

Rabbit Monoclonal Anti-Human

PLAP-EP194



Placenta stained with Anti-PLAP

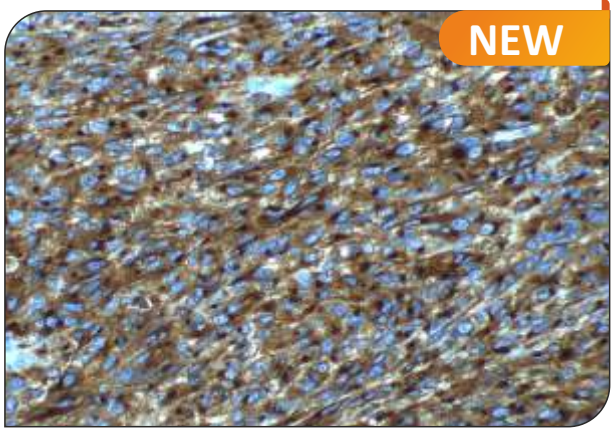
Clone	:	EP194
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Membrane or Cytoplasm
Control	:	Placenta, Germ Cell Tumor

Catalog#	Catalog#	Catalog#
PR066-3ml (RTU)	PR066-6ml (RTU)	—
HAR066-3ml (RTU)	HAR066-6ml (RTU)	—
CR066-0.1ml (Conc)	CR066-0.5ml (Conc)	CR066-1ml (Conc)

TE

Alkaline phosphatases (ALP) are dimeric enzymes by glycosylphosphatidylinositol anchors to the cell membrane. There are at least four distinct but related isozymes: placenta ALP (PLAP), germ cell ALP (PLAP-like or GCAP), intestinal ALP (IAP) and non-specific tissue ALP (TNAP). These isozymes may serve to guide migratory cells, to transport specific molecules such as fat and immunoglobulins across membranes or to detoxify lipopolysaccharide and prevent bacterial invasion across the gut mucosal barrier. This antibody specifically recognizes PLAP and GCAP. PLAP is expressed in the human placenta beginning late in the first trimester of pregnancy. GCAP is expressed in normal endocervix and fallopian tube. PLAP has been used as a marker for germ cell tumor.

Rabbit Monoclonal Anti-Human
PMEL-17-GP100P



Melanoma stained with Anti-PMEL-17

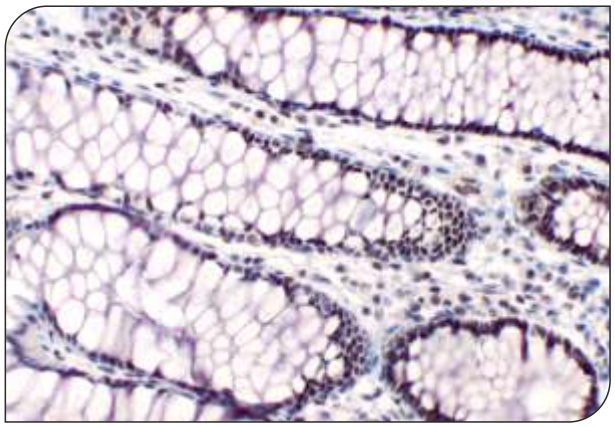
Clone	:	GP100P
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Melanoma

Catalog#	Catalog#	Catalog#
PR343-3ml (RTU)	PR343-6ml (RTU)	—
HAR343-3ml (RTU)	HAR343-6ml (RTU)	—
CR343-0.1ml (Conc)	CR343-0.5ml (Conc)	CR343-1ml (Conc)

TE

PMEL 17 is a melanosome specific antigen, also is designed as HMB45 or gp100. It plays a central role in the biogenesis of melanosomes, involved in the maturation of melanosomes from stage I to II. The transition from stage I melanosomes to stage II melanosomes involves an elongation of the vesicle, and the appearance within of distinct fibrillar structures. II PMEL 17 is presented in immature and activated melanocytes (due to, e.g., inflammation, increased vascularity or underlying tumor), but not in mature, resting melanocytes. In tumor tissues, it is restricted expressed in melanoma. Studies support the routine use of PMEL 17 (HMB45) as a sensitive and specific melanocytic marker.

Rabbit Monoclonal Anti-Human
PMS2-EP51



Colon stained with Anti-PMS2

Clone	:	EP51
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Colon, Colon Ca

Catalog#	Catalog#	Catalog#
PR067-3ml (RTU)	PR067-6ml (RTU)	—
CR067-0.1ml (Conc)	CR067-0.5ml (Conc)	CR067-1ml (Conc)

TE

PMS2, a mismatch repair endonuclease, is a member of a family of genes involved in DNA mismatch repair. Carriers of the mismatch repair gene mutations have a high lifetime risk of developing Hereditary Non-Polyposis Colon Cancer (HNPCC) and several other cancers including endometrial cancer due to microsatellite instability (MSI) caused by accumulation of DNA replication errors in proliferating cells. Along with MLH1, MSH2 and MSH6, PMS2 antibody is helpful in diagnosis of MSI. The loss of PMS2 was associated with young age of diagnosis and right sided location but not with a striking family history of cancer. Endometrial carcinomas are the most common non-colorectal cancers occur in HNPCC. The most common IHC abnormality in endometrial carcinomas with MSI was concurrent loss of MLH1/PMS2.

E - EDTA BUFFER

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Rabbit Monoclonal Anti-Human
PMS2-MMRP

Colon stained with Anti-PMS2

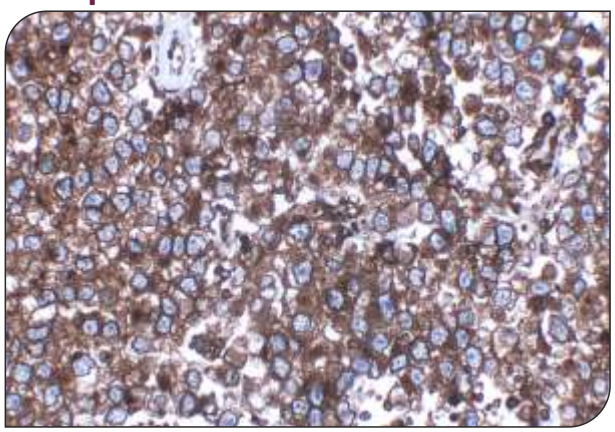
Clone	:	MMRP
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Colon Ca, Colon

Catalog#	Catalog#	Catalog#
PR324-3ml (RTU)	PR324-6ml (RTU)	—
CR324-0.1ml (Conc)	CR324-0.5ml (Conc)	CR324-1ml (Conc)

TE

Mismatch repair (MMR) proteins is a group of nuclear enzymes, which in all proliferating cells participate in repair of base-base mismatch, that occur during DNA replication. Loss of MMR proteins leads to an accumulation of DNA replication errors in the proliferating cells, particularly in areas of the genome with short repetitive nucleotide sequences, a phenomenon known as microsatellite instability (MSI).The PMS2 protein forms a heterodimer with the MLH1 protein which is then activated in the presence of ATP; this complex coordinates the binding of other proteins that repair DNA errors arising during cell preparation for cell division. The loss of PMS2 expression in tumors can be helpful in identifying hMLH1 mutation carriers and identifies their suitability for mutation analysis. PMS2 gene defects account for a small but significant proportion of colorectal cancers and for a substantial proportion of tumors with microsatellite instability. Compared to molecular biological techniques, immunohistochemical analysis of MMR protein expression is much simpler and cheaper. Immunohistochemical analysis helps to pinpoint the affected gene and should be readily accessible in a pathology laboratory.

Mouse Monoclonal Anti-Human
Podoplanin-D2-40



Testis stained with Anti-Podoplanin

Clone	:	D2-40
Isotype	:	Mouse IgG1,k
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm and Membrane
Control	:	Testis, Tonsil, Germ Cell Tumor, Epitheloid Malignant Mesothelioma

Catalog#	Catalog#	Catalog#
PM231-3ml (RTU)	PM231-6ml (RTU)	—
HAM231-3ml (RTU)	HAM231-6ml (RTU)	—
CM231-0.1ml (Conc)	CM231-0.5ml (Conc)	CM231-1ml (Conc)

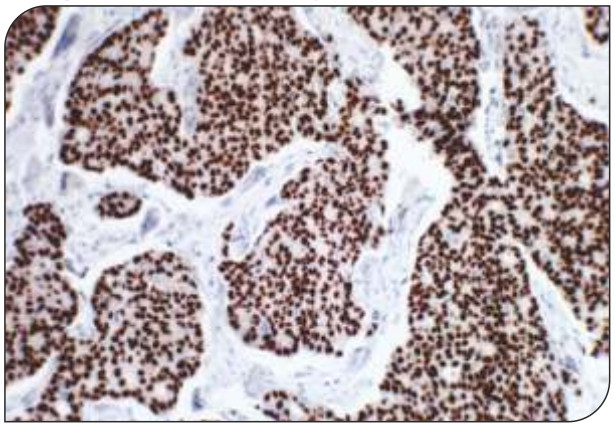
TE

Mouse anti human podoplanin antibody, clone D2-40 was raised against M2A antigen and detects podoplanin. Podoplanin (PDPN) is an O-glycosylated transmembrane glycoprotein that is selectively expressed by, and is a marker of, lymphatic endothelial cells. In normal tissue the 38 kDa protein is also present in human lung, placenta, heart, skeletal muscle and kidney podocytes.

It is not found in the blood vasculature. The function of podoplanin is yet to be fully elucidated; however, it may be involved in cell migration and/or actin cytoskeleton organization.

It is required for normal lung cell proliferation and alveolus formation at birth, and can induce platelet aggregation. Mouse anti-human podoplanin antibody, clone D2-40 has been shown to be a sensitive and specific antibody for the detection of lymphatic endothelium in different malignancies, and is of value in the routine evaluation of lymphatic invasion in esophageal cancer. Clone D2-40 was reported to be an excellent immunohisto-chemical marker of cutaneous Kaposi's sarcomas, and may be useful in the differential diagnosis of epithelioid malignant mesothelioma versus adenocarcinoma.

Rabbit Monoclonal Anti-Human
Progesterone Receptor-EP2



Breast Ca stained with Anti-Progesterone Receptor

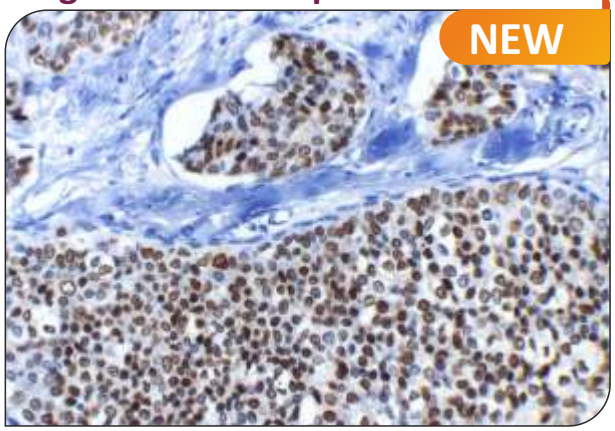
Clone	:	EP2
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Breast Ca

Catalog#	Catalog#	Catalog#
PR068-3ml (RTU)	PR068-6ml (RTU)	—
HAR068-3ml (RTU)	HAR068-6ml (RTU)	—
CR068-0.1ml (Conc)	CR068-0.5ml (Conc)	CR068-1ml (Conc)

TE

The human progesterone receptor (PR), is a ligand activated transcription factor and is a member of the steroid receptor family. PR exists in humans as two isoforms; PR-A (94 kDa) which lacks the first 164 amino acids of PR-B and PR-B (114 kDa). While the two forms of PR have similar DNA and ligand binding affinities they have opposite transcriptional activities. PR-B functions as an activator of progesterone-responsive genes, while PR-A functions as a strong transdominant repressor of PR-B. This anti-PR recognize both PR-A and B. It labels epithelial cells of breast, ovary and endometrium.

Rabbit Monoclonal Anti-Human
Progesterone Receptor-PRM122



Breast Ca stained with Anti-Progesterone Receptor

Clone	:	PRM122
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Breast Ca

Catalog#	Catalog#	Catalog#
PR323-3ml (RTU)	PR323-6ml (RTU)	—
HAR323-3ml (RTU)	HAR323-6ml (RTU)	—
CR323-0.1ml (Conc)	CR323-0.5ml (Conc)	CR323-1ml (Conc)

TE

Progesterone is one of the central regulators of female reproduction. In breast development, progesterone is involved in the formation of lobular-alveolar structures and also affects differentiation in the breast by modulation of milk protein synthesis. The cellular effects of progesterone are mediated through progesterone receptors (PR). PR, a protein with 946 amino acids, is a ligand-activated transcription factor member of the steroid receptor super family of nuclear receptors. PR is predominantly expressed in female sex steroid responsive tissues such as the mammary gland, uterus and ovary but is also found in other tissues such as endocrine cells of the Langerhans' islets.The estrogen receptor (ER) and PR status has been used for over 20 years as a predictor of breast carcinoma responsiveness to endocrine therapy and as a prognostic indicator for early recurrence.

E - EDTA BUFFER

TE - TRIS-EDTA BUFFER

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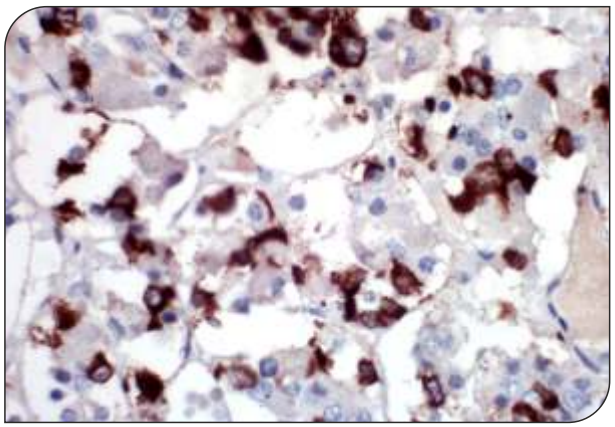
Rabbit Monoclonal Anti-Human
Prolactin-EP193



Pituitary stained with Anti-Prolactin

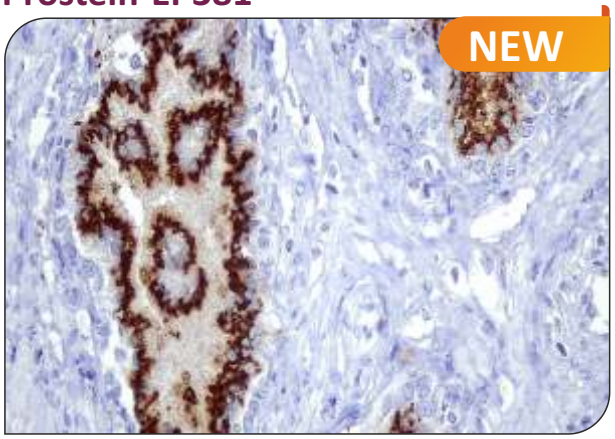
Clone	:	EP193
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Pituitary, Prolactinoma

Catalog#	Catalog#	Catalog#
PR193-3ml (RTU)	PR193-6ml (RTU)	—
HAR193-3ml (RTU)	HAR193-6ml (RTU)	—
CR193-0.1ml (Conc)	CR193-0.5ml (Conc)	CR193-1ml (Conc)

C

Prolactin is a peptide hormone secreted by the anterior pituitary that is necessary for the proliferation and differentiation of the mammary glands. Prolactin also acts in a cytokine like manner and as an important regulator of the immune system. Prolactin has important cell cycle related functions as a growth, differentiating and anti-apoptotic factor. Prolactin is secreted by lactotrophs in the anterior pituitary. Prolactin producing cells make up approximately 20 percent of the pituitary. Elevated counts of these cells have been observed in pregnant women, newborns and in multiparous women. An antibody to prolactin is useful for the identification of pituitary tumors.

Rabbit Monoclonal Anti-Human
Prostein-EP381



Prostate Ca stained with Anti-Prostein

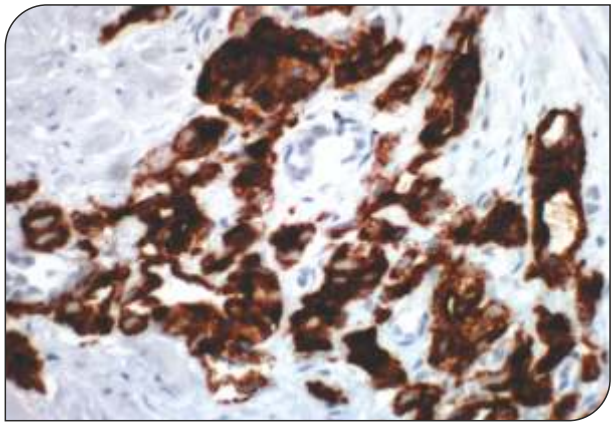
Clone	:	EP381
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Prostate, Prostate Ca

Catalog#	Catalog#	Catalog#
PR283-3ml (RTU)	PR283-6ml (RTU)	—
HAR283-3ml (RTU)	HAR283-6ml (RTU)	—
CR283-0.1ml (Conc)	CR283-0.5ml (Conc)	CR283-1ml (Conc)

TE

Prostein, also known as P501S, is encoded by the Solute carrier family 45, member 3 (SLC45A3) gene, an androgen regulated gene and a prostate specific marker expressed in prostate glandular cells. SLC45A3 is the second most common gene function partner in prostate cancers.SLC45A3-ERG and SLC45A3-ELK4 fusion transcripts have been detected in prostate cancer. Loss of Prostein expression in SLC45A3-ERG tumors are significantly associated with high Gleason scores and poor clinical outcomes. Prostein immunoreactivity is seen in the majority of primary and metastatic prostate carcinomas. Staining for prostein in conjunction with PSA improves identification of prostatic origin in unknown primary lesions, when compared against prostein or PSA staining alone.

Rabbit Monoclonal Anti-Human
Prostate Specific Antigen-EP109



Prostate Ca stained with Anti-Prostate Specific Antigen

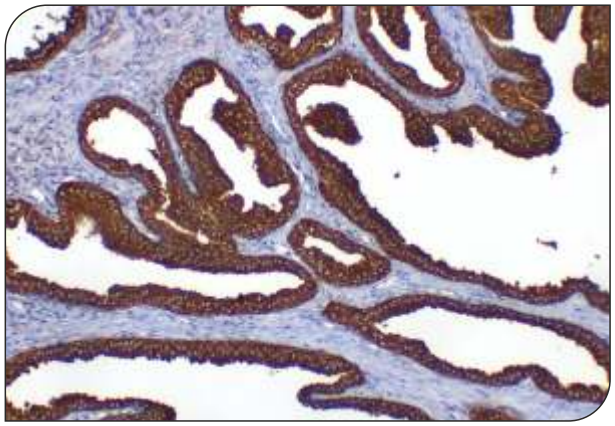
Clone	:	EP109
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Prostate Ca, BPH, Prostate

Catalog#	Catalog#	Catalog#
PR069-3ml (RTU)	PR069-6ml (RTU)	—
HAR069-3ml (RTU)	HAR069-6ml (RTU)	—
CR069-0.1ml (Conc)	CR069-0.5ml (Conc)	CR069-1ml (Conc)

C

Prostate specific antigen (PSA) is a serine protease member of the human glandular kallikrein family. It is synthesized in prostate ductal and acinar epithelium, and is diffused into serum. It is found in normal, hyperplastic, and malignant prostate tissue. Low expression of PSA has been reported in other normal or tumor tissues such as urethral, periurethral, and perianal glands, salivary duct carcinoma, and rare mammary carcinomas. Although low PSA expression has been found in other tissues, PSA is still a specific and sensitive marker for immunohistochenical analysis of tumors with prostate epithelial cell differentiation. It is valuable in the identification of metastatic tumors of prostatic origin.

Mouse Monoclonal Anti-Human
PsAP-PASE/4LJ



Prostate Ca stained with Anti-PsAP

Clone	:	PASE/4LJ
Isotype	:	Mouse IgG1
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Prostate Ca, BPH

Catalog#	Catalog#	Catalog#
PM182-3ml (RTU)	PM182-6ml (RTU)	—
HAM182-3ml (RTU)	HAM182-6ml (RTU)	—
CM182-0.1ml (Conc)	CM182-0.5ml (Conc)	CM182-1ml (Conc)

TE

Anti-PsAP reacts with prostatic acid phosphatase in the glandular epithelium of normal and hyperplastic prostate, carcinoma of the prostate, and metastatic cells of prostatic carcinoma. This marker may be helpful in pinpointing the site of origin in cases of metastatic carcinoma of the prostate, and is considered a more sensitive marker than PSA. However, it also offers less specificity. Nevertheless, PsAP complements PSA in the right clinical context.

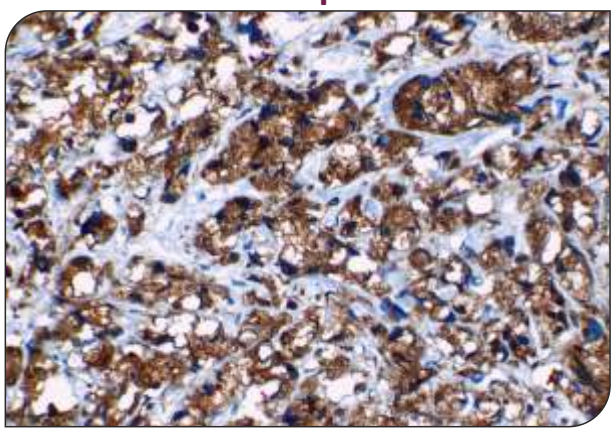
E-EDTA BUFFER

TE-TRIS-EDTA BUFFER

C-CITRATE BUFFER

Rabbit Monoclonal Anti-Human

Prostatic Acid Phosphatase-EP53



Prostate Ca stained with Anti-Prostatic Acid Phosphatase

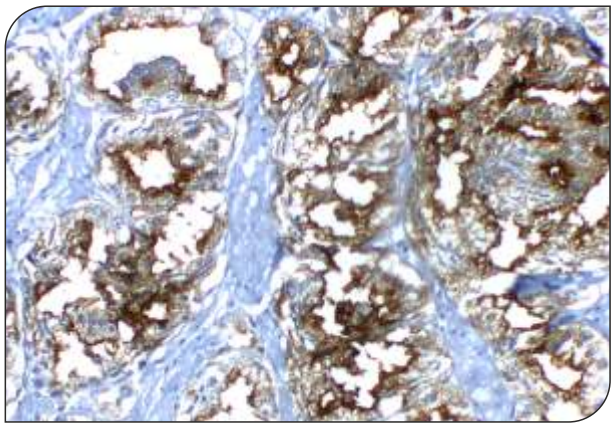
Clone	:	EP53
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Prostate Ca, BPH, Prostate

Catalog#	Catalog#	Catalog#
PR147-3ml (RTU)	PR147-6ml (RTU)	—
HAR147-3ml (RTU)	HAR147-6ml (RTU)	—
CR147-0.1ml (Conc)	CR147-0.5ml (Conc)	CR147-1ml (Conc)

C Prostatic Acid Phosphatase (PAP), a member of the histidine acid phosphatase family, is an enzyme that is a major component of prostatic fluid and secreted by the epithelial cells of the prostate gland. Antibody to PAP labels normal prostate epithelial cells, hyperplastic and cancer cells of prostate. It is helpful in identification of tumors with prostate origin.

Rabbit Monoclonal Anti-Human

PSMA-EP192



Prostate Ca stained with Anti-PSMA

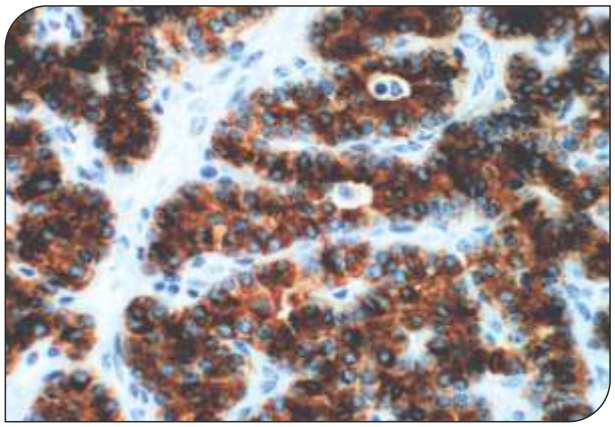
Clone	:	EP192
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm or Membrane
Control	:	Prostate, Prostate Ca

Catalog#	Catalog#	Catalog#
PR164-3ml (RTU)	PR164-6ml (RTU)	—
HAR164-3ml (RTU)	HAR164-6ml (RTU)	—
CR164-0.1ml (Conc)	CR164-0.5ml (Conc)	CR164-1ml (Conc)

TE Prostate specific membrane antigen (PSMA), also known as folate hydrolase 1(FOLH1), is a type II transmembrane glycoprotein belonging to the M28 peptidase family. PSMA has two enzymatic activities, one as a prostate specific integral membrane folate hydrolase and the other as a carboxypeptidase. An antibody to PSMA labels normal prostate epithelial cells and prostate tumor cells. Although the expression of PSMA in neovasculature of a variety of solid tumors has been reported, PSMA expression is highly restricted to the prostate. It is a useful marker for prostate tumors. In prostate cancer, overexpression of PSMA is correlated with high tumor grade, non-diploid tumors, and advanced tumor stage. It can be used as an effective predictor for tumor progression in prostate cancer.

Mouse Monoclonal Antibody

Para Thyroid Hormone-PTH/911



Pituitary gland stained with Anti-Para Thyroid Hormone

Clone	:	PTH/911
Isotype	:	Mouse IgG2b k
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Pituitary Gland, Parathyroid Gland

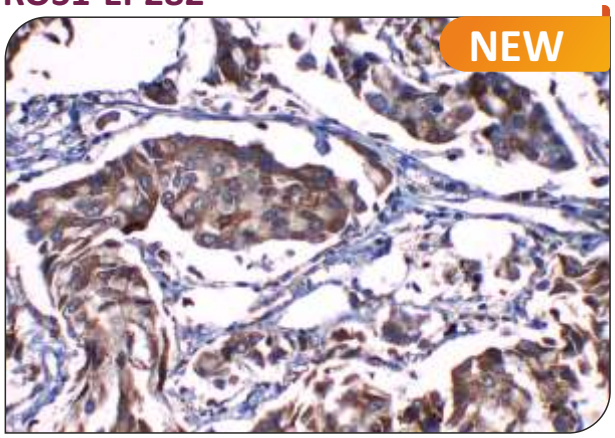
Catalog#	Catalog#	Catalog#
PM234-3ml (RTU)	PM234-6ml (RTU)	—
HAM234-3ml (RTU)	HAM234-6ml (RTU)	—
CM234-0.1ml (Conc)	CM234-0.5ml (Conc)	CM234-1ml (Conc)

TE

Epitope of this MAb maps in the N-terminus of Parathyroid Hormone (PTH), a hormone produced by the parathyroid gland that regulates the concentration of calcium and phosphorus in extracellular fluid. This hormone elevates blood Ca2+ levels by dissolving the salts in bone and preventing their renal excretion. It is produced in the parathyroid gland as an 84 amino acid single chain polypeptide. It can also be secreted as N-terminal truncated fragments or C-terminal fragments after intracellular degradation, as in case of hypercalcemia. Defects in this gene are a cause of familial isolated hypoparathyroidism (FIH); also called autosomal dominant hypoparathyroidism or autosomal dominant hypocalcemia. FIH is characterized by hypocalcemia and hyperphosphatemia due to inadequate secretion of parathyroid hormone. Symptoms are seizures, tetany and cramps. FIH exist both as autosomal dominant and recessive forms of hypoparathyroidism.

Rabbit Monoclonal Anti-Human

ROS1-EP282



Lung Cancer stained with Anti-ROS1

Clone	:	EP282
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm and Membrane
Control	:	NSCLC

Catalog#	Catalog#	Catalog#
PR356-3ml (RTU)	PR356-6ml (RTU)	—
CR356-0.1ml (Conc)	CR356-0.5ml (Conc)	CR356-1ml (Conc)

TE

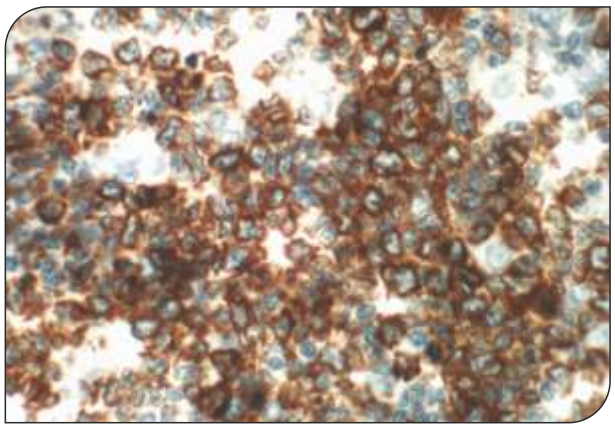
ROS1 is a transmembrane protein with tyrosine kinase activity with putative function as a growth or differentiation factor receptor. ROS1 expression is limited in normal tissues to occasional staining cerebellum, stomach, small intestine, colon and kidney. Rearrangements of the ROS1 proto-oncogene was originally detected in glioblastoma and cholangiocarcinoma. ROS1 fusion partners include CD74, SLC34A2 and SDC4, leading to oncogenic transformation. ROS1 neoplastic transformation is widely studied in non-small cell lung cancer (NSCLC). While ROS1 is undetectable in the normal lung, studies have described ROS1 rearrangements in 1-2% of NSCLC by FISH. Recent reports have demonstrated strong correlation between ROS1 immunoreactivity with FISH positivity.

E -EDTA BUFFER

TE -TRIS-EDTA BUFFER

C -CITRATE BUFFER

Rabbit Monoclonal Anti-Human
RRM1-EP242



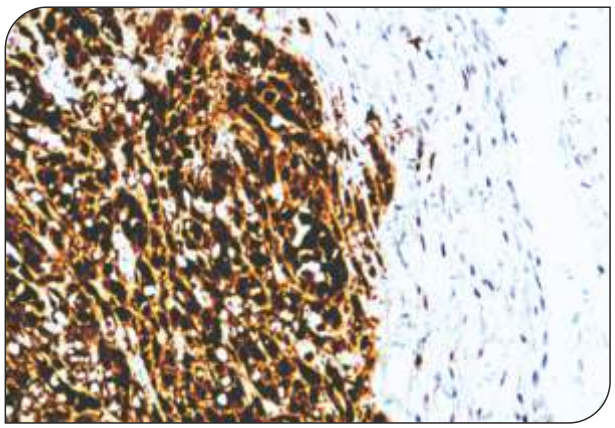
Tonsil stained with Anti-RRM-1

Clone	:	EP242
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Tonsil, Breast Ca

Catalog#	Catalog#	Catalog#
PR259-3ml (RTU)	PR259-6ml (RTU)	—
CR259-0.1ml (Conc)	CR259-0.5ml (Conc)	CR259-1ml (Conc)

TE Ribonucleoside diphosphatereductase large subunit (RRM1) is one of two non-identical subunits that constitute ribonucleoside diphosphatereductase, an enzyme essential for the production of deoxyribo nucleotides prior to DNA synthesis in S phase of dividing cells. Studies have shown that RRM1 controls cell proliferation through deoxynucleotide production and metastatic propensity through PTEN induction. RRM1 expression is significantly correlated with the expression of ERCC1 and PTEN in non-small cell lung cancer (NSCLC). Tumors with high expression of RRM1 showed slow progression.

Rabbit Monoclonal Anti-Human
S100 Beta-EP32



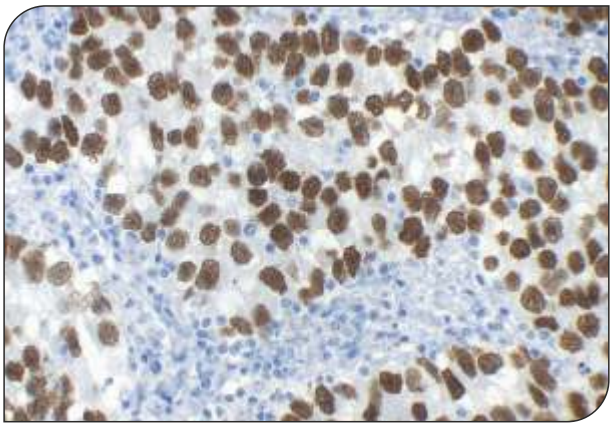
Melanoma stained with Anti-S100 Beta

Clone	:	EP32
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Melanoma, Skin

Catalog#	Catalog#	Catalog#
PR070-3ml (RTU)	PR070-6ml (RTU)	—
HAR070-3ml (RTU)	HAR070-6ml (RTU)	—
CR070-0.1ml (Conc)	CR070-0.5ml (Conc)	CR070-1ml (Conc)

TE S100 Beta is a homodimeric member of the S100 superfamily. S100 is a family of Ca2+ binding proteins, comprising 19 members that are differentially expressed in a large number of cell types. This protein has been implicated in cellular processes such as cell differentiation and growth. S100 Beta is abundant in glial cells of the central and peripheral nervous system, in melanocytes, chondrocytes, and adipocytes. It also labels Langerhans cells, histiocytes, epithelial, myoepithelial cells and integrating reticular cells of lymphoid tissue, and tumors originated from these cells. S100 Beta is a useful marker for diagnosis of melanoma and tumors of the nervous system.

Rabbit Monoclonal Anti-Human
SALL4-EP299



Seminoma stained with Anti-SALL4

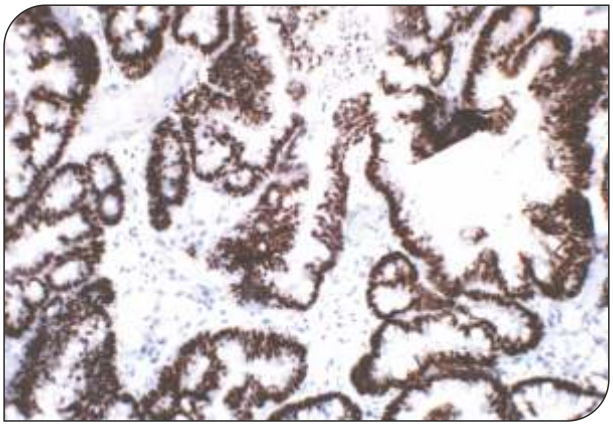
Clone	:	EP299
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Seminoma, Yolk Sac Tumor, Germ Cell Tumor

Catalog#	Catalog#	Catalog#
PR227-3ml (RTU)	PR227-6ml (RTU)	—
CR227-0.1ml (Conc)	CR227-0.5ml (Conc)	CR227-1ml (Conc)

TE

The Sal-like protein 4, SALL4 is a zinc finger transcription factor located on chromosome 20q13.13-13.2. It is essential during development by maintaining embryonic stem cell pluripotency and self-renewal. Recently, SALL4 has been identified as a novel sensitive diagnostic marker for germ cell tumors. Strong SALL4 staining was observed in all seminoma/ dysgerminoma/ germinomas, embryonal carcinomas, and yolk sac tumors, yielding 100% sensitivity for these malignancies. Compared with a-fetoprotein and glypican-3, SALL4 demonstrated superior sensitivity in detecting yolk sac tumors. Focal SALL4 staining was also observed in choriocarcinomas (66-71%) and teratomas (50-64%). In non-germ cell tumors, SALL4 is expressed in all cases of acute myeloid leukemia, and majority of Precursor B-cell acute lymphoblastic lymphomas (79%). In a large immunohistochemical study of 3200 cases, SALL4 was also detected in ~20% of cases of ovarian, urothelial and gastric adenocarcinomas, and 5% in mammary, colorectal, prostatic and squamous cell carcinomas.

Rabbit Monoclonal Anti-Human
SATB2-EP281



Colon Ca stained with Anti-SATB2

Clone	:	EP281
Isotype	:	Rabbit IgG
Reactivity	:	Human,FFPE
Localization	:	Nucleus
Control	:	Colon, Colon Ca

Catalog#	Catalog#	Catalog#
PR239-3ml (RTU)	PR239-6ml (RTU)	—
HAR239-3ml (RTU)	HAR239-6ml (RTU)	—
CR239-0.1ml (Conc)	CR239-0.5ml (Conc)	CR239-1ml (Conc)

TE

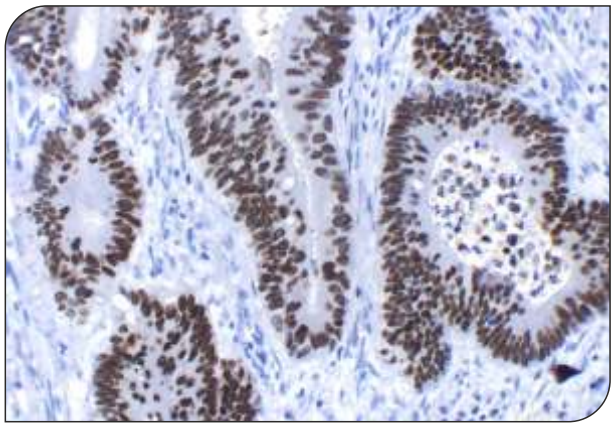
DNA binding protein SATB2, also known as Special AT rich sequence binding protein 2, is a nuclear matrix associated transcription factor. SATB2 acts as a docking site for chromatin remodeling enzymes and recruits co activators and co-repressors to control nuclear gene expression. SATB2 also regulates skeletal development, osteoblast differentiation, and modulates immunoglobulin expression. In normal tissues, strong nuclear SATB2 expression is observed in essentially all glandular cells lining the lower gastrointestinal tract, including the appendix, colon, and rectum. SATB2 is also expressed in a subset of neuronal cells from the cerebral cortex and hippocampus. In tumor tissues, SATB2 is detected in cancer cells of colorectal origin and may function as a clinically useful diagnostic marker for colorectal cancer (CRC). In a multi cohort study with 1882 primary and metastatic CRCs, SATB2 shows high sensitivity (85%) for CRC, and further enhanced to 93% when stained in conjunction with Cytokeratin 20. A recent study showed SATB2 expression in 89% of medullary carcinomas of the large intestine. SATB2 has been suggested as a valuable prognostic marker: high SATB2 expression was determined as an independent marker of good prognosis and sensitivity to chemotherapy and radiation in CRC while loss of SATB2 expression was correlated with poor prognosis in laryngeal carcinoma patients.

E -EDTA BUFFER

TE -TRIS-EDTA BUFFER

C -CITRATE BUFFER

Rabbit Monoclonal Anti-Human
SATB2-PRM111



Colon Ca stained with Anti-SATB2

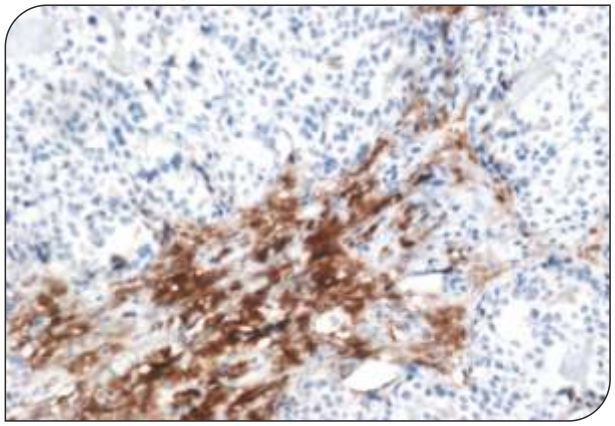
Clone	:	PRM111
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Colon, Colon Ca

Catalog#	Catalog#	Catalog#
PR312-3ml (RTU)	PR312-6ml (RTU)	—
HAR312-3ml (RTU)	HAR312-6ml (RTU)	—
CR312-0.1ml (Conc)	CR312-0.5ml (Conc)	CR312-1ml (Conc)

TE

DNA-binding protein SATB2, also known as Special AT-rich sequence-binding protein 2, is a nuclear matrix-associated transcription factor. SATB2 acts as a docking site for chromatin remodeling enzymes and recruits co-activators and co-repressors to control nuclear gene expression. SATB2 also regulates skeletal development, osteoblast differentiation, and modulates immunoglobulin expression. In normal tissues, strong nuclear SATB2 expression is observed in essentially all glandular cells lining the lower gastrointestinal tract, including the appendix, colon, and rectum. SATB2 is also expressed in a subset of neuronal cells from the cerebral cortex and hippocampus. In tumor tissues, SATB2 is detected in cancer cells of colorectal origin and may function as a clinically useful diagnostic marker for colorectal cancer (CRC). In a multi-cohort study with 1882 primary and metastatic CRCs, SATB2 shows high sensitivity (85%) for CRC, which is further enhanced to 93% when stained in conjunction with Cytokeratin 20. A recent study showed SATB2 expression in 89% of medullary carcinomas of the large intestine. SATB2 has been suggested as a valuable prognostic marker: high SATB2 expression was determined as an independent marker of good prognosis and sensitivity to chemotherapy and radiation in CRC while loss of SATB2 expression was correlated with poor prognosis in laryngeal carcinoma patients.

Rabbit Monoclonal Anti-Human
Serum Amyloid-A-EP335



Amyloidosis stained with Anti-Serum Amyloid-A

Clone	:	EP335
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Amyloidosis, Kidney

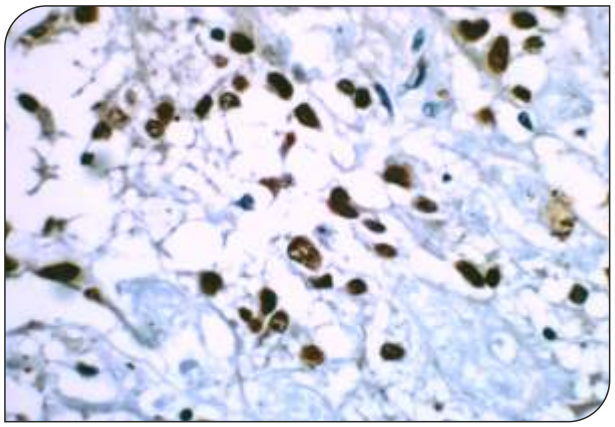
Catalog#	Catalog#	Catalog#
PR268-3ml (RTU)	PR268-6ml (RTU)	—
CR268-0.1ml (Conc)	CR268-0.5ml (Conc)	CR268-1ml (Conc)

TE

Serum Amyloid A (SAA) is an acute phase protein primarily synthesized in the liver. While it is typically found at low concentrations in healthy individuals, pro-inflammatory cytokines upregulates SAA production to encourage recruitment of immune cells to inflammatory sites. Amyloidosis is a disease characterized by the abnormal buildup of amyloid, abnormal non-branching fibrillary b-pleated sheet proteins that are insoluble and highly resistant to proteolytic degradation that result into localized or systemic organ dysfunction. Amyloidosis are grouped as AL (primary), AA (secondary), and hereditary forms. Proper classification is important since treatment and prognoses of the disorders are vastly different. AA (secondary) amyloidosis is associated with a variety of chronic inflammatory conditions and infections, derived from SAA. Immunohistochemical staining using a panel of antibodies including K and Ilg light chains, amyloid A, and transthyretin can aid in recognizing most forms of amyloid. Recently, SAA has also been investigated as a potential marker for neoplastic activity. SAA concentrations have been reported to be a marker of poor prognosis, elevated in patients with advanced stages of cancer and those with malignant disease.

Rabbit Monoclonal Anti-Human
SOX2-EP103

E TE



Glioma stained with Anti-SOX2

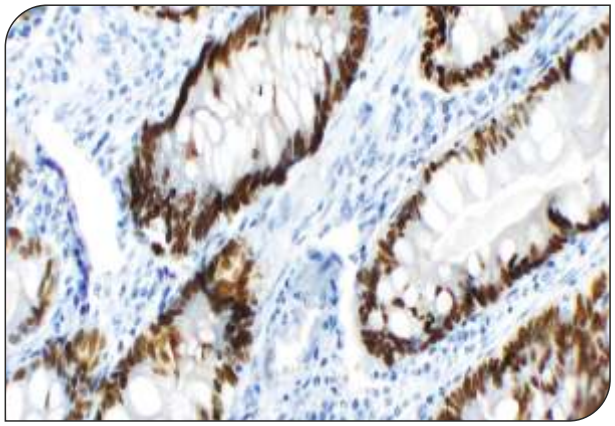
Clone	:	EP103
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Oligodendroglioma, Brain

Catalog#	Catalog#	Catalog#
PR071-3ml (RTU)	PR071-6ml (RTU)	—
HAR071-3ml (RTU)	HAR071-6ml (RTU)	—
CR071-0.1ml (Conc)	CR071-0.5ml (Conc)	CR071-1ml (Conc)

SOX2 is a member of the SRY-related HMG-box (SOX) family of transcription factors involved in the regulation of embryonic development and in the determination of cell fate. It is required for stem cell maintenance in the central nervous system, and it also regulates gene expression in the stomach. SOX2 is necessary for regulating multiple transcription factors that affect Oct3/4 expression. An essential function of SOX2 is to stabilize embryonic stem cells in a pluripotent state by maintaining the requisite level of Oct3/4 expression. SOX2 is expressed in fetal brain. It is a marker for multipotential neural stem cells. In tumors, SOX2 expression is observed in teratoma of the central nervous system, melanoma, testicular germ cell tumor, cervical carcinoma, lung cancer, breast cancer with basal cell phenotype, and squamous cell carcinoma of the gastrointestinal tract. It may be a useful marker for the identification and quantitative grading of immature teratomas in the central nervous system. In a recent study of SOX2 expression on testicular germ cell tumor, all 30 embryonal carcinomas showed positive staining for SOX2, whereas all were negative for SOX17, thus SOX2 may be useful in the identification of embryonal carcinoma. In stage I lung adenocarcinomas, SOX2 seems to be an independent predictor of poor outcome and may help stratify patients at increased risk for recurrence.

Rabbit Monoclonal Anti-Human
SOX9-EP317

TE



Colon Ca Well Differentiated stained with Anti-SOX9

Clone	:	EP317
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Colon, Colon Ca

Catalog#	Catalog#	Catalog#
PR300-3ml (RTU)	PR300-6ml (RTU)	—
HAR300-3ml (RTU)	HAR300-6ml (RTU)	—
CR300-0.1ml (Conc)	CR300-0.5ml (Conc)	CR300-1ml (Conc)

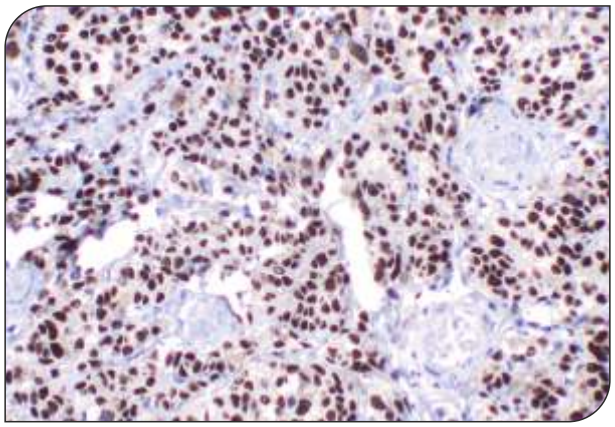
SOX9, known as sex determining region Y (SRY) related high mobility group (HMG) box 9, is an important transcription factor required for development. As a transcriptional regulator, SOX9 is an important downstream gene of beta-catenin. It is expressed during embryogenesis, in the cartilage, neural crest, kidney and pancreas. SOX9 is also involved in the regulation of sex determination and progenitor cell pool maintenance, required for committed differentiation. In normal colorectal mucosa, SOX9 expression is found predominantly to the lower part of crypts, the proliferative compartment and putative site of stem cells, suggesting SOX9 as a putative stem or progenitor cell biomarker.

E-EDTA BUFFER

TE-TRIS-EDTA BUFFER

C-CITRATE BUFFER

Rabbit Monoclonal Anti-Human
SOX10-EP268



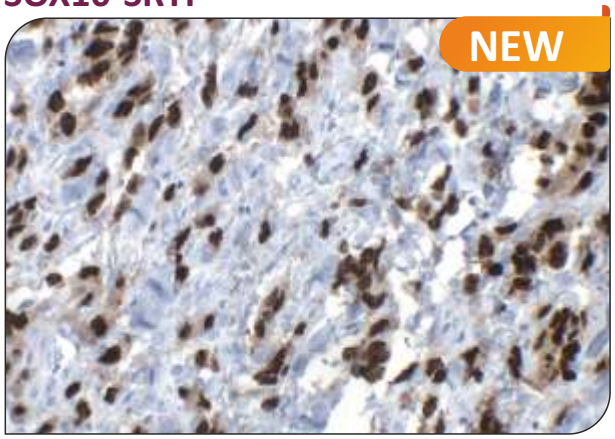
Melanoma stained with Anti-SOX10

Clone	:	EP268
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Melanoma, Brain

Catalog#	Catalog#	Catalog#
PR135-3ml (RTU)	PR135-6ml (RTU)	—
HAR135-3ml (RTU)	HAR135-6ml (RTU)	—
CR135-0.1ml (Conc)	CR135-0.5ml (Conc)	CR135-1ml (Conc)

C SOX10 is a member of the SOX (SRY related HMG box) family of transcription factors involved in the regulation of embryonic development and in the determination of cell fate. During development, SOX10 first appears in the forming neural crest and continues to be expressed in Schwann cells. It is important for differentiation, maturation and maintenance of Schwann cells and melanocytes. In normal tissues, SOX10 is expressed in Schwann cells and glial cells in the nervous system. It is also detected in melanocytes and epithelial cells of salivary gland and mammary gland. In tumor tissues, SOX10 labels melanoma and the tumor of neural crest origin. A recent study reported the expression of SOX10 in basal like, unclassified triple-negative breast carcinoma. Thus, breast carcinoma must be considered in the differential diagnosis of melanoma for a SOX10 positive metastatic malignant neoplasm.

Rabbit Monoclonal Anti-Human
SOX10-SRYP



Melanoma stained with Anti-SOX10

Clone	:	SRYP
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Melanoma

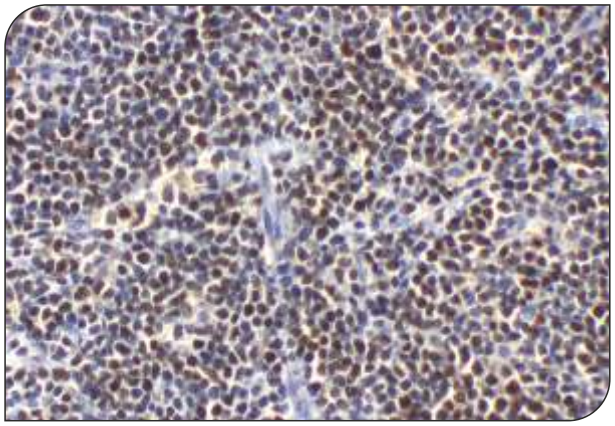
Catalog#	Catalog#	Catalog#
PR338-3ml (RTU)	PR338-6ml (RTU)	—
HAR338-3ml (RTU)	HAR338-6ml (RTU)	—
CR338-0.1ml (Conc)	CR338-0.5ml (Conc)	CR338-1ml (Conc)

TE SOX10 is a member of the SRY-related HMG-box (SOX) family of transcription factors involved in the regulation of embryonic development and in the determination of cell fate. During development, SOX10 first appears in the forming neural crest and continues to be expressed in Schwann cells. It is important for differentiation, maturation and maintenance of Schwann cells and melanocytes.

In normal tissues, SOX10 is expressed in Schwann cells and glial cells in the nervous system. It is also detected in melanocytes and epithelial cells of salivary gland and mammary gland. In tumor tissues, S0X10 labels melanoma and tumors of neural crest origin. SOX10 is more specific than S100 protein in the detection of melanocytic and schwannian neoplasms, and has in some studies shown more sensitive.

Mouse Monoclonal Anti-Human

SOX11-CL0142



Mantle Cell Lymphoma stained with Anti-SOX11

Clone	:	CL0142
Isotype	:	Mouse IgG2a
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Brain, Mantle Cell Lymphoma

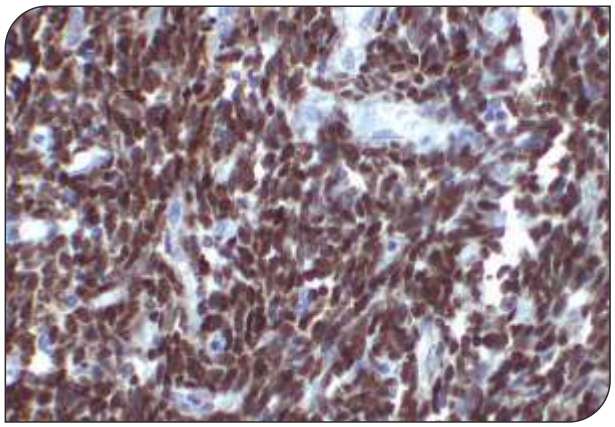
Catalog#	Catalog#	Catalog#
PM290-3ml (RTU)	PM290-6ml (RTU)	—
CM290-0.1ml (Conc)	CM290-0.5ml (Conc)	CM290-1ml (Conc)

TE

Transcription factor SOX11 is a member of the group C SOX (SRY related HMG box) transcription factor family involved in the regulation of embryonic development and in the determination of the cell fate. The encoded protein may act as a transcriptional regulator after forming a protein complex with other proteins. The protein may function in the developing nervous system and play a role in tumorigenesis and adult neurogenesis. SOX11 is normally expressed in the developing human central nervous system, Medulloblastoma, and Glioma. Anti-SOX11 nuclear protein expression is highly associated with both CyclinD1 positive and negative Mantle Cell Lymphomas, with a stronger and more homogeneous Immunohistochemistry staining than CyclinD1.

Rabbit Monoclonal Anti-Human

STAT6-EP325



SFT stained with Anti-STAT6

Clone	:	EP325
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus and Cytoplasm
Control	:	Solitary Fibrous Tumor (SFT)

Catalog#	Catalog#	Catalog#
PR262-3ml (RTU)	PR262-6ml (RTU)	—
HAR262-3ml (RTU)	HAR262-6ml (RTU)	—
CR262-0.1ml (Conc)	CR262-0.5ml (Conc)	CR262-1ml (Conc)

TE

Signal Transducer and Activator of Transcription 6 (STAT6) is a transcription factor in the Jak/STAT signal transduction pathway responsible for mediating IL-4 immune signaling. STAT6 was recently suggested to be a reliable marker to distinguish solitary fibrous tumors from other soft tissue neoplasms. Gene fusions are common in solitary fibrous tumors. Recent next generation sequencing studies demonstrated the presence of a NAB2-STAT6 fusion, formed by an intrachromosomal inversion fusing two neighboring genes on chromosome 12q13, in 55-100% of solitary fibrous tumors, regardless of tumor morphology or anatomical site. Analysis is further complicated due to the difficulty in detecting this fusion by fluorescence in situ hybridization (FISH). Solitary fibrous tumors are classically characterized by CD34 positive spindle cells. However, approximately 5-10% of these tumors are negative for CD34, posing challenges for differential diagnosis.

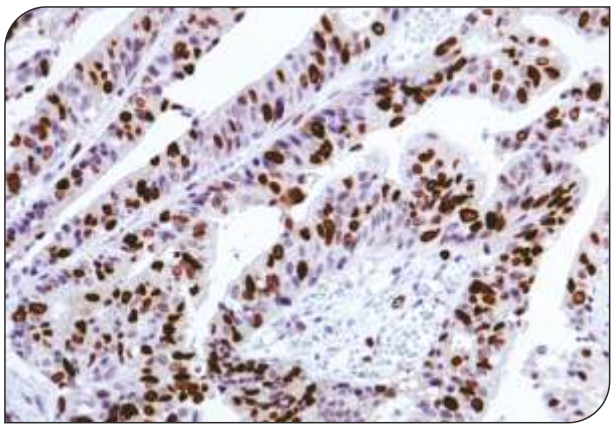
By immunohistochemistry, nuclear STAT6 expression can discriminate solitary fibrous tumors from its morphological mimics in the meninges, including meningioma, glioblastoma, gliosarcoma, haemangioblastoma, schwannoma and haemangioma.

E - EDTA BUFFER

TE - TRIS-EDTA BUFFER

C - CITRATE BUFFER

Rabbit Monoclonal Anti-Human
Survivin-EP119



Gastric Ca stained with Anti-Survivin

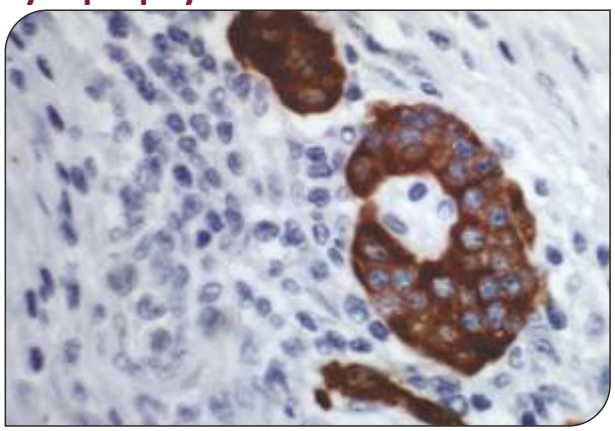
Clone	:	EP119
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus or Cytoplasm
Control	:	Gastric Ca, Colon

Catalog#	Catalog#	Catalog#
PR072-3ml (RTU)	PR072-6ml (RTU)	—
CR072-0.1ml (Conc)	CR072-0.5ml (Conc)	CR072-1ml (Conc)

TE

Survivin is a unique member of the inhibitor of apoptosis (IAP) protein family that interferes with post-mitochondrial events including activation of caspases. The association of Survivin expression with tumor progression, but not overall patient survival, has been observed in a variety of malignancies including renal cell carcinoma, ovary carcinoma, hepatocellular carcinoma, prostate carcinoma and breast carcinoma. However, the link between a poor prognosis and nuclear expression of Survivin in tumors is controversial. A literature review of 19 publications that measured nuclear Survivin in different cancer types showed the following: 9 studies concluded that nuclear Survivin was associated with an unfavorable prognosis, whereas 5 showed a favorable prognosis.

Rabbit Monoclonal Anti-Human
Synaptophysin-GR007



Pancreas stained with Anti-Synaptophysin

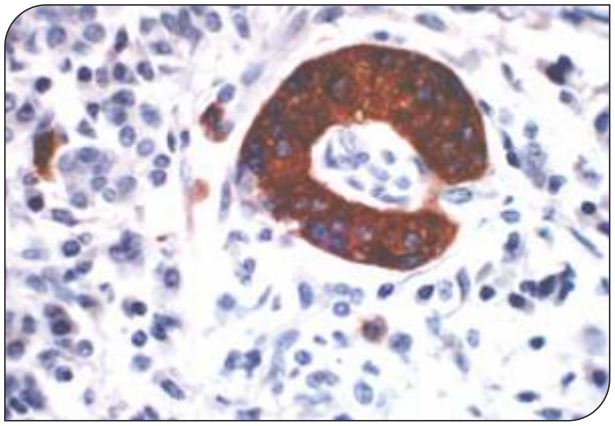
Clone	:	GR007
Isotype	:	NA
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Neuro Endocrine Tumors, Pancreas

Catalog#	Catalog#	Catalog#
PR102-3ml (RTU)	PR102-6ml (RTU)	—
HAR102-3ml (RTU)	HAR102-6ml (RTU)	—
CR102-0.1ml (Conc)	CR102-0.5ml (Conc)	CR102-1ml (Conc)

C

Synaptophysin is expressed in presynaptic vesicles of various kinds of neurons.This antibody has specific staining of neuronal, adrenal, and neuroepithelial tumors. Positive results may be a useful tool for the identification of a wide spectrum of neuroendocrine neoplasms. Differential diagnosis is aided by the results from a panel of antibodies. Note: Nuclear staining may be present in some tissues when using heat induced epitope retrieval (HIER). It shall not be considered as specific staining.

Rabbit Monoclonal Anti-Human
Synaptophysin-EP158



Pancreas stained with Anti-Synaptophysin

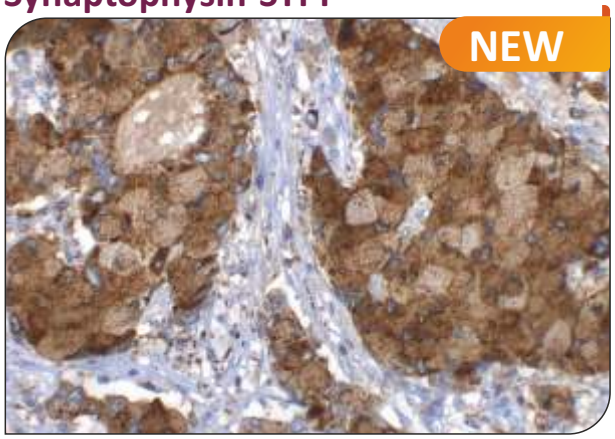
Clone	:	EP158
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Pancreas, Neuroendocrine Tumor

Catalog#	Catalog#	Catalog#
PR124-3ml (RTU)	PR124-6ml (RTU)	—
HAR124-3ml (RTU)	HAR124-6ml (RTU)	—
CR124-0.1ml (Conc)	CR124-0.5ml (Conc)	CR124-1ml (Conc)

C

Synaptophysin is a major integral transmembrane glycoprotein of synaptic vesicles with four transmembrane domains. This protein is present in almost all neurons and neuroendocrine cells throughout the body. An antibody to Synaptophysin is useful for the identification of tumors with neural and neuroendocrine differentiation.

Rabbit Monoclonal Anti-Human
Synaptophysin-SYPP



Neuroendocrine Tumor stained with Anti-Synaptophysin

Clone	:	SYPP
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Brain, Glioma, Pancreas, Neuroendocrine Tumor

Catalog#	Catalog#	Catalog#
PR339-3ml (RTU)	PR339-6ml (RTU)	—
HAR339-3ml (RTU)	HAR339-6ml (RTU)	—
CR339-0.1ml (Conc)	CR339-0.5ml (Conc)	CR339-1ml (Conc)

TE

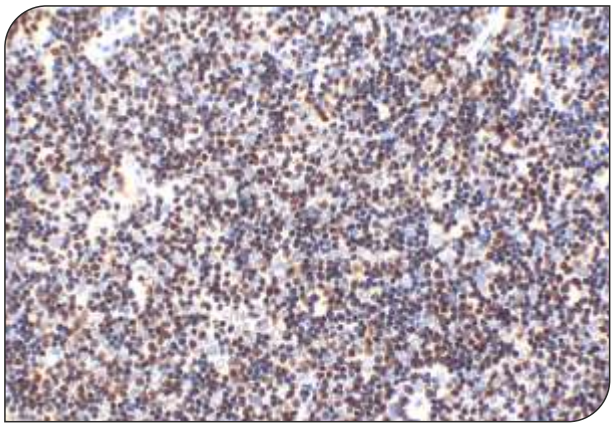
Synaptophysin, also known as the major synaptic vesicle protein p38, is a protein that in humans is encoded by the SYP gene. The exact function of the protein is unknown: it interacts with the essential synaptic vesicle protein synaptobrevin, but when the synaptophysin gene is experimentally inactivated in animals, they still develop and function normally. Synaptophysin reacts with neuroendocrine cells of human adrenal medulla, carotid body, skin, pituitary, thyroid, lung, pancreas, and gastrointestinal mucosa. This antibody identifies normal neuroendocrine cells and neuroendocrine neoplasms. Synaptophysin is expressed independently of other neuronal differentiation markers and may be used as a differentiation marker in tumor diagnosis.

E - EDTA BUFFER

TE - TRIS-EDTA BUFFER

C - CITRATE BUFFER

Rabbit Monoclonal Anti-Human
TdT-EP266



Thymus stained with Anti-TdT

Clone	:	EP266
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Thymoma, Thymus, Tonsil

Catalog#	Catalog#	Catalog#
PR110-3ml (RTU)	PR110-6ml (RTU)	—
HAR110-3ml (RTU)	HAR110-6ml (RTU)	—
CR110-0.1ml (Conc)	CR110-0.5ml (Conc)	CR110-1ml (Conc)

TE

Terminal deoxynucleotidyl transferase (TdT) is a unique DNA polymerase that changes the addition of deoxynucleoside 5'-triphosphate to the 3'-end of a DNA initiator without template direction. TdT contributes to the generation of junctional diversity in antigen receptors of immature lymphocytes. TdT is expressed in lymphoid precursors of B and T-cell lineage in thymus and bone marrow. Foci of TdT positive cells may be observed in peripheral lymphoid tissues. TdT is also present in malignant tumors of lymphoblastic lineage and thymoma. It is a sensitive and specific marker for lymphoblastic lymphoma/leukemia.

Rabbit Monoclonal Anti-Human
TdT-DNTP

Tonsil stained with Anti-TdT

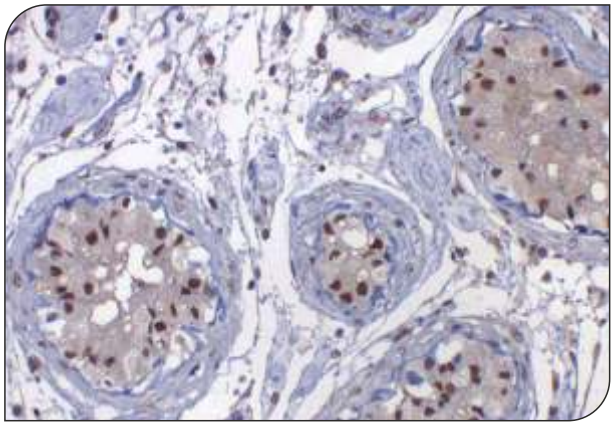
Clone	:	DNTP
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Tonsil, Thymus, Thymoma

Catalog#	Catalog#	Catalog#
PR362-3ml (RTU)	PR362-6ml (RTU)	—
HAR362-3ml (RTU)	HAR362-6ml (RTU)	—
CR362-0.1ml (Conc)	CR362-0.5ml (Conc)	CR362-1ml (Conc)

TE

Terminal deoxynucleotidyl transferase (TdT) is an unusual deoxynucleotide polymerizing enzyme with a molecular weight of about 58 kDa found normally only in B- and T-cell lymphoblasts/prelymphocytes. TdT generates antigen receptor diversity by synthesizing non-germ line elements (N-regions) at the junctions of rearranged Ig heavy chain and T cell receptor gene segments.Rare TdT-positive cells are regularly detected in thymus and bone marrow. Typically, TdT expression in the thymus is very variable from cell to cell since it is rapidly decreased in more mature T-cells. Tdt-positive cells may occasionally be found in tonsils, lymph nodes and extranodal lymphoid tissue. Immunohistochemical detection of TdT has value in classification of malignant lymphomas and acute leukaemias, particularly for the identification of pre-B and pre-T acute lymphoblastic leukemia/lymphoblastic lymphoma (ALL/LBL).

Rabbit Monoclonal Anti-Human
TFE3-EP285



Testis stained with Anti-TFE3

Clone	:	EP285
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus or Cytoplasm
Control	:	Alveolar Soft Part Sarcoma, Testis, RCC

Catalog#	Catalog#	Catalog#
PR220-3ml (RTU)	PR220-6ml (RTU)	—
CR220-0.1ml (Conc)	CR220-0.5ml (Conc)	CR220-1ml (Conc)

TE

TFE3, known as Transcription Factor E3, is a member of the helix loop helix family of transcription factors. TFE3 interacts with several transcriptional regulators to affect cell growth, proliferation and osteoclast and macrophage differentiation. In the immune system, TFE3 plays important roles in modulating immunoglobulin heavy chain expression and regulating B-cell activation. Additionally, TFE3 participates in insulin signaling and may play a role in enhancing insulin sensitivity. The TFE3 gene is located on chromosome Xp11.2. Translocations within this region generates TFE3 gene fusion products and clinically manifests as Xp11.2 translocation renal cell carcinoma (Xp11 TRCC), alveolar soft part sarcoma, perivascular epithelioid cell tumor, and epithelioid hemangio endotheliomas. Since translocation can lead to overexpression of nuclear TFE3 and is a marker of metastasis and poor survival, immunohistochemical detection of TFE3 can be valuable as a prognostic factor, an indicator of lymph node metastasis, and a screening marker for Xp11.2 translocation before genetic analysis.

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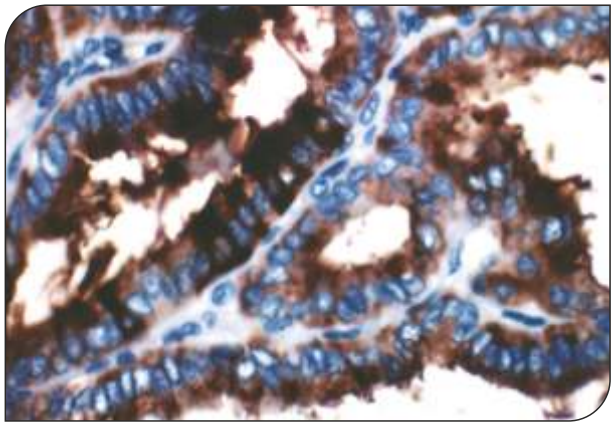
Rabbit Monoclonal Anti-Human
Thyroglobulin-EP250



Thyroid Ca stained with Anti-Thyroglobulin

Clone	:	EP250
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Thyroid Ca, Thyroid

Catalog#	Catalog#	Catalog#
PR073-3ml (RTU)	PR073-6ml (RTU)	—
HAR073-3ml (RTU)	HAR073-6ml (RTU)	—
CR073-0.1ml (Conc)	CR073-0.5ml (Conc)	CR073-1ml (Conc)

TE

Thyroglobulin (TG) is a dimeric glycoprotein specific to the thyroid gland which belongs to the type B carboxylesterase/ lipase family. It is the precursor of the iodinated thyroid hormones triiodothyronine (T3) and thyroxine (T4). Variations in TG are associated with susceptibility to autoimmune thyroid disease type 3, and defective or impaired TG synthesis usually results in congenital goitrous hypothyroidism, virtual absence of TG in thyroid tissue, and the presence of an elevated concentration of iodoalbumin. The final result of these abnormalities is a decreased rate of T3 and T4 synthesis. Thyroglobulin is found in normal thyroid and differentiated thyroid carcinoma cells but not undifferentiated thyroid. Thyroglobulin is a useful marker for identification of tumors with thyroid origin.

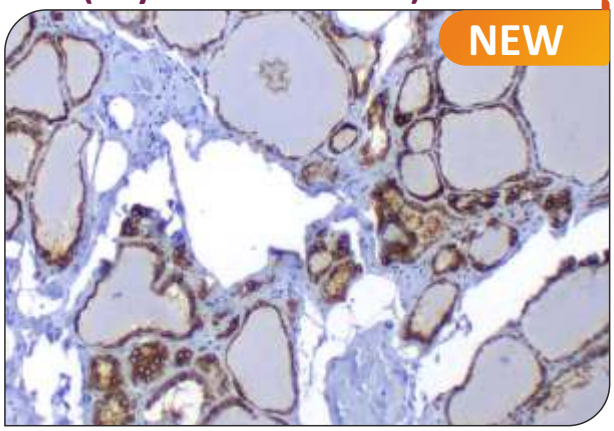
E -EDTA BUFFER

TE -TRIS-EDTA BUFFER

C -CITRATE BUFFER

Rabbit Monoclonal Anti-Human

TPO (Thyroid Peroxidase)-PRM127



Thyroid stained with Anti-TPO

Clone	:	PRM127
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Thyroid, Thyroid Ca

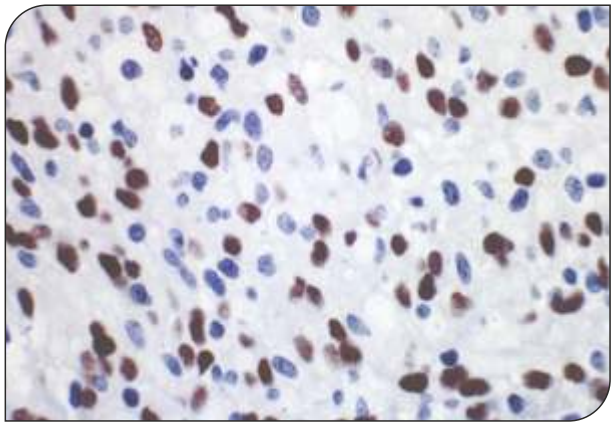
Catalog#	Catalog#	Catalog#
PR329-3ml (RTU)	PR329-6ml (RTU)	—
HAR329-3ml (RTU)	HAR329-6ml (RTU)	—
CR329-0.1ml (Conc)	CR329-0.5ml (Conc)	CR329-1ml (Conc)

TE Thyroid Peroxidase (TPO) is an enzyme expressed mainly in the thyroid where it is secreted into colloid. Thyroid peroxidase oxidizes iodide ions to form iodine atoms for addition onto tyrosine residues on thyroglobulin for the production of thyroxine (T4) or triiodothyronine (T3), the thyroid hormones. In humans, thyroperoxidase is encoded by the TPO gene. The TPO gene consists of 17 exons, and is located on the short arm of chromosome 2.

Thyroid Peroxidase gene expression is under the regulation of thyroid stimulating hormone. In normal thyroid, expression of TPO described immuno-histochemically is reported to produce a diffuse, fine, granular cytoplasmic stain in all follicular cells. Thyroid Peroxidase antibody labels normal thyroid epithelial cells and thyroid tumor cells.The expression level in thyroid carcinomas is lower than that of normal and benign thyroid tumors. Decreased TPO immunoreactivity is an early event in follicular tumourigenesis, taking place before development of invasiveness in parallel with an acceleration of cell growth and appearance of cell atypia.

Mouse Monoclonal Anti-Human

TLE1-1F5



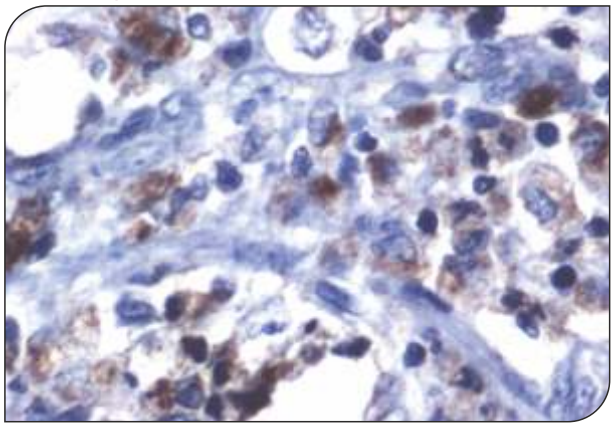
Synovial Sarcoma stained with Anti-TLE1

Clone	:	1F5
Isotype	:	Mouse IgG2a
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Synovial Sacroma

Catalog#	Catalog#	Catalog#
PM179-3ml (RTU)	PM179-6ml (RTU)	—
HAM179-3ml (RTU)	HAM179-6ml (RTU)	—
CM179-0.1ml (Conc)	CM179-0.5ml (Conc)	CM179-1ml (Conc)

TE Transducin like enhancer of split 1 (TLE1) gene is a member of the TLE gene family and involved in control of hematopoiesis, neuronal, and terminal epithelial differentiation. Anti-TLE1 was more sensitive and specific for synovial sarcoma than other currently available immunohistochemical markers including BCL2, epithelial membrane antigen and cytokeratins. TLE1 overexpression by immunohistochemistry is a highly sensitive and specific biomarker for the diagnosis of synovial sarcoma in the group of otherwise unclassifiable high grade sarcomas.

Mouse Monoclonal Anti-Human
TNF Alpha-TNF1172



Lung Adeno Ca stained with Anti-TNF Alpha

Clone	:	TNF1172
Isotype	:	Mouse IgM,k
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm and Membrane
Control	:	Histiocytoma, Lung Adeno Ca

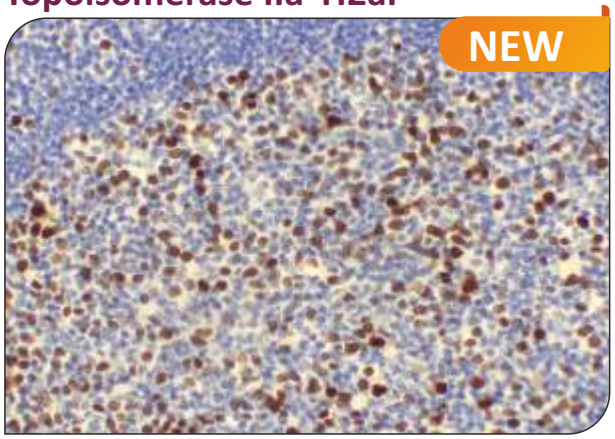
Catalog#	Catalog#	Catalog#
PM214-3ml (RTU)	PM214-6ml (RTU)	—
HAM214-3ml (RTU)	HAM214-6ml (RTU)	—
CM214-0.1ml (Conc)	CM214-0.5ml (Conc)	CM214-1ml (Conc)

TE

This MAb recognizes human 17-26kDa protein, which is identified as cytokine TNF-alpha (Tumor Necrosis Factor-alpha). TNF-alpha can be expressed as a 17kDa free molecule, or as a 26kDa membrane protein. TNF-alpha is a protein secreted by lipopolysaccharide stimulated macrophages, and causes tumor necrosis when injected into tumor bearing mice. TNF alpha causes cytolysis of certain transformed cells, being synergistic with interferon gamma in its cytotoxicity. Although it has little effect on many cultured normal human cells, TNF alpha appears to be directly toxic to vascular endothelial cells.

Other actions of TNF alpha include stimulating growth of human fibroblasts and other cell lines, activating polymorphonuclear neutrophils and osteoclasts, and induction of interleukin 1, prostaglandin E2 and collagenase production. TNF alpha is currently being evaluated in treatment of certain cancers and AIDS Related Complex.

Rabbit Monoclonal Antibody
Topoisomerase IIa-TI2aP



Tonsil stained with Anti-Topoisomerase

Clone	:	TI2aP
Isotype	:	Rabbit, IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Tonsil, Thymus, Spleen

Catalog#	Catalog#	Catalog#
PR306-3ml (RTU)	PR306-6ml (RTU)	—
HAR306-3ml (RTU)	HAR306-6ml (RTU)	—
CR306-0.1ml (Conc)	CR306-0.5ml (Conc)	CR306-1ml (Conc)

TE

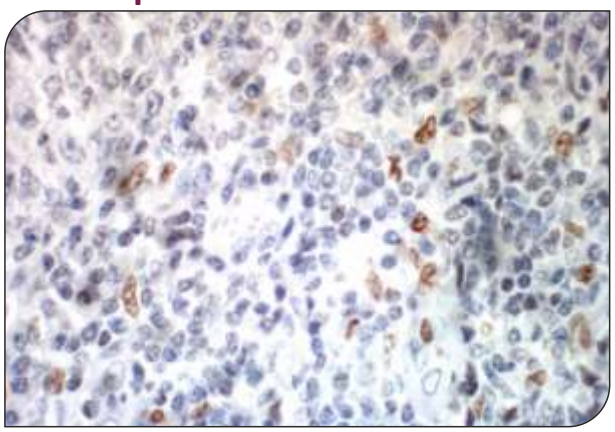
Topoisomerase IIa isoform is a 170 kDa nuclear protein and plays an important role in DNA synthesis and RNA transcription, as well as chromosomal segregation during mitosis. Topoisomerase IIa is reported to be a sensitive and specific marker of late S, G2 & M phases in transformed and developmentally regulated normal cells, and has been shown to be overexpressed in many human cancers. Decreased expression of Topoisomerase IIa is the predominant mechanism of resistance to several chemotherapeutic agents.

E -EDTA BUFFER

TE -TRIS-EDTA BUFFER

C -CITRATE BUFFER

Rabbit Monoclonal Anti-Human
Transcription Factor PU.1-EP18



Tonsil stained with Anti-Transcription Factor PU.1

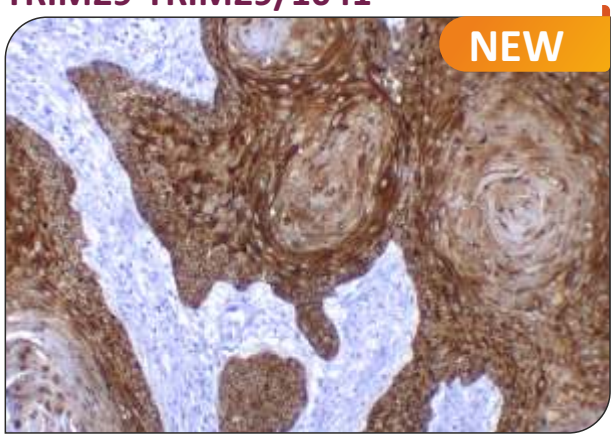
Clone	:	EP18
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Tonsil, Lymphoma

Catalog#	Catalog#	Catalog#
PR238-3ml (RTU)	PR238-6ml (RTU)	—
HAR238-3ml (RTU)	HAR238-6ml (RTU)	—
CR238-0.1ml (Conc)	CR238-0.5ml (Conc)	CR238-1ml (Conc)

TE

PU.1 is a member of the Ets family of transcription factors and is required for the development of multiple hematopoietic lineages. It plays a pivotal role in normal myeloid differentiation and regulates the expression of immunoglobulin and other genes that are important for B-cell development. Antibody against PU.1 stains B lymphocyte in germinal center and mantle B-cell, but not plasma cell. Anti-PU.1 labels many types of B-cell lymphoma including mantle cell lymphoma, but PU.1 is not expressed in classical Hodgkin lymphoma (cHL). The lack of transcription factor PU.1 protein expression in cHL, a lymphoproliferative disease of predominantly B-cell origin, likely contributes to the lack of immunoglobulin expression and incomplete B-cell phenotype characteristic of the Reed-Sternberg cells in cHL.

Mouse Monoclonal Anti Human
TRIM29-TRIM29/1041



SSC stained with Anti-TRIM29

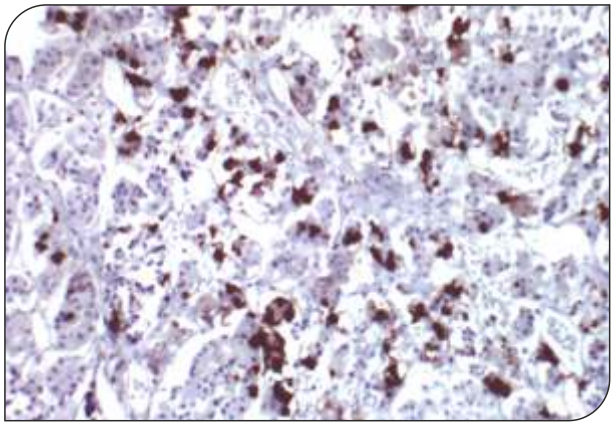
Clone	:	TRIM29/1041
Isotype	:	Mouse IgG2a,k
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm and Membrane
Control	:	Lung SCC, Maydin Ulcer SCC, Cervix SCC, Buccal Mucosa SCC

Catalog#	Catalog#	Catalog#
PM294-3ml (RTU)	PM294-6ml (RTU)	—
HAM294-3ml (RTU)	HAM294-6ml (RTU)	—
CM294-0.1ml (Conc)	CM294-0.5ml (Conc)	CM294-1ml (Conc)

TE

It recognizes a 66kDa protein, which is identified as Tripartite motif-containing protein 29 (TRIM29). It interacts with the intermediate filament protein vimentin, a substrate for the PKC family of protein kinases, and with hPKCI-1, an inhibitor of the PKCs. TRIM29 protein contains both zinc finger and leucine zipper motifs, suggesting that it may form homodimers and possibly associate with DNA. High expression of TRIM29 has been reported in gastric cancer and pancreatic cancer, and correlates with enhanced tumor growth and lymph node metastasis. TRIM29 is also able to distinguish lung squamous cell carcinoma from lung adenocarcinoma with ~90% positive accuracy, when used in a panel with TTF-1, p63, CK5/6, and Napsin A antibodies.

Rabbit Monoclonal Anti-Human
TSH-EP254



Pituitary Gland stained with Anti-TSH

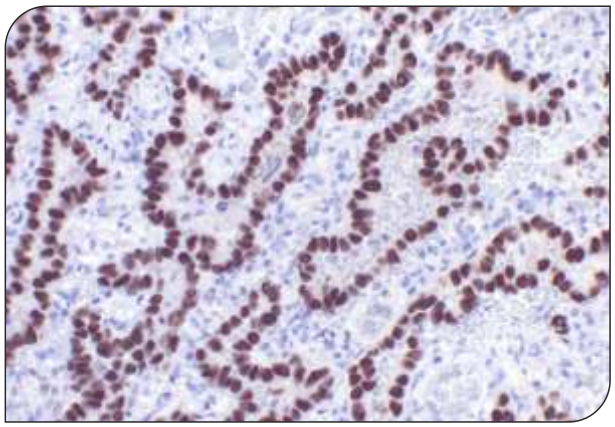
Clone	:	EP254
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Pituitary, Pituitary Adenoma

Catalog#	Catalog#	Catalog#
PR218-3ml (RTU)	PR218-6ml (RTU)	—
HAR218-3ml (RTU)	HAR218-6ml (RTU)	—
CR218-0.1ml (Conc)	CR218-0.5ml (Conc)	CR218-1ml (Conc)

TE

TSH is a member of the glycoprotein hormone family, constituting a subset of the cystine knot growth factor superfamily. TSH is produced by the pituitary thyrotrophs and released into circulation in a pulsatile manner. It stimulates thyroid functions using a specific membrane TSH receptor (TSHR) that belongs to the superfamily of G protein coupled receptors (GPCRs). TSH beta is the beta subunit of thyroid stimulating hormone. This TSH antibody labels normal and neoplastic thyrotropic cells. It may be useful in classification of pituitary tumors.

Rabbit Monoclonal Anti-Human
TTF1-EP229



Lung Adeno Ca stained with Anti-TTF-1

Clone	:	EP229
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Thyroid, Lung Adeno Ca, Lung

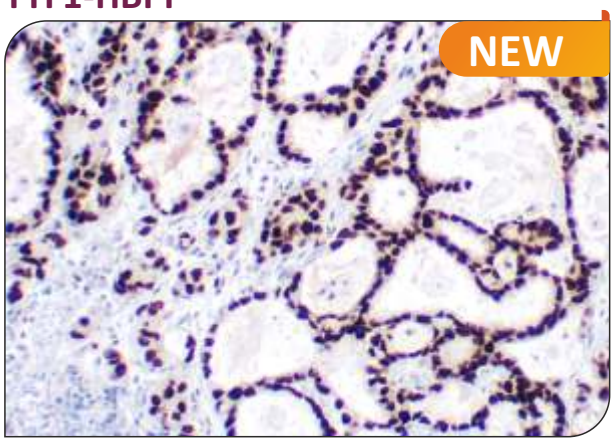
Catalog#	Catalog#	Catalog#
PR162-3ml (RTU)	PR162-6ml (RTU)	—
HAR162-3ml (RTU)	HAR162-6ml (RTU)	—
CR162-0.1ml (Conc)	CR162-0.5ml (Conc)	CR162-1ml (Conc)

TE

Thyroid transcription factor 1 (TTF-1) is a 38kDa homeodomain containing nuclear transcription factor belonging to the NKX2 gene family. TTF-1 expression was found in early stages of gestation and could play an important role in cell differentiation and morphogenesis of the thyroid and lung. TTF-1 is expressed in epithelial cells of the lung and thyroid in normal tissues. TTF-1 is also used as a marker for distinguishing lung and thyroid carcinomas. Additional studies showed TTF-1 is expressed in endometrial carcinoma and small cell carcinomas of the prostate and bladder. A panel of antibodies would be valuable in identifying tumors of lung or thyroid origin.

Rabbit Monoclonal Anti-Human
TTF1-HBPP

TE



Lung Adeno Ca stained with Anti-TTF-1

Clone	:	HBPP
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Thyroid, Lung Adeno Ca

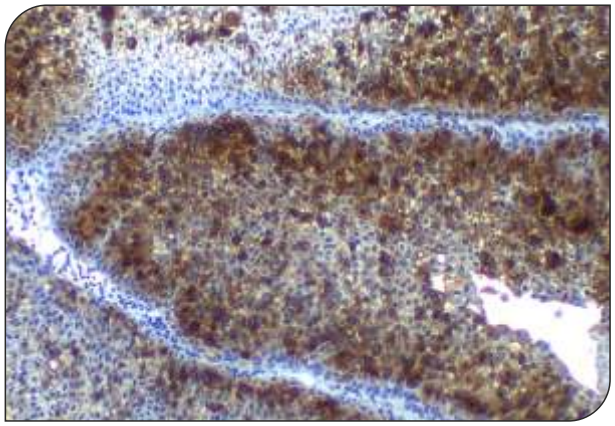
Catalog#	Catalog#	Catalog#
PR340-3ml (RTU)	PR340-6ml (RTU)	—
HAR340-3ml (RTU)	HAR340-6ml (RTU)	—
CR340-0.1ml (Conc)	CR340-0.5ml (Conc)	CR340-1ml (Conc)

Thyroid transcription factor-1 (TTF-1) is a protein that regulates transcription of genes specific to the thyroid, lung and diencephalon. It is also known as thyroid-specific enhancer binding protein and NKX-2. It is used as a marker to determine if a tumor oringinates in the lung or thyroid. TTF-1 positive cells are found in Type II pneumocytes and Clara cells in the lung. In the thyroid, follicular and parafollicular cells are positive. TTF-1 antibody is useful in differentiating primary Adenocarcinoma of the Lung from Metastatic Carcinomas of the breast and Malignant Mesothelioma. It can also be used to differentiate Small-Cell Lung Carcinoma from lymphoid infiltrates.

For lung cancers, Adenocarcinomas are usually positive, while Squamous Cell Carcinomas and Large Cell Carcinomas are rarely positive. Small-Cell Carcinomas (of any primary site) are usually positive.

Rabbit Monoclonal Anti-Human
Uroplakin III-EP321

C TE



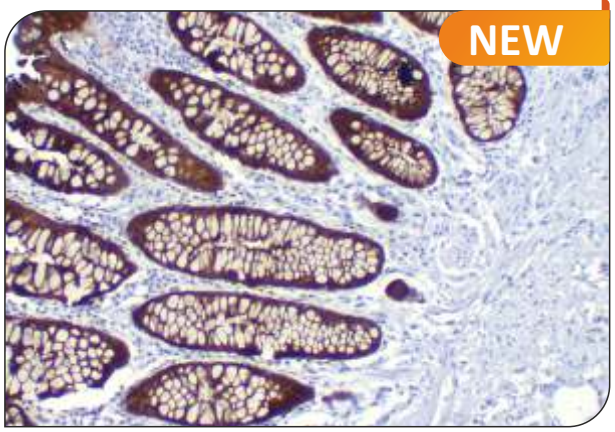
Urinary bladder stained with Anti-Uroplakin III

Clone	:	EP321
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm or Membrane
Control	:	Urothelial Ca

Catalog#	Catalog#	Catalog#
PR213-3ml (RTU)	PR213-6ml (RTU)	—
HAR213-3ml (RTU)	HAR213-6ml (RTU)	—
CR213-0.1ml (Conc)	CR213-0.5ml (Conc)	CR213-1ml (Conc)

Uroplakin III (UP III) is one of the four transmembrane proteins (UPIa, UPIb, UPII, and UPIII) that are specifically expressed in terminally differentiated urothelialcells. Studies have shown that UPIII is highly specific for identification of primary and metastatic urothelial carcinomas. However, the sensitivity of UPIII in detection of urothelial carcinoma is moderate. Combined use of a panel of antibodies is important in the diagnosis of urothelial tumors.

Rabbit Monoclonal Anti-Human
Villin-ACBP



Colon stained with Anti-Villin

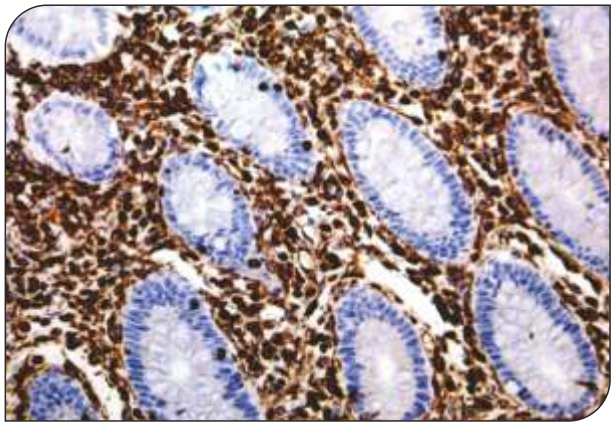
Clone	:	ACBP
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Colon, Colon Ca

Catalog#	Catalog#	Catalog#
PR342-3ml (RTU)	PR342-6ml (RTU)	—
HAR342-3ml (RTU)	HAR342-6ml (RTU)	—
CR342-0.1ml (Conc)	CR342-0.5ml (Conc)	CR342-1ml (Conc)

TE

Villin is a 93 kDa calcium-regulated, actin-binding protein that plays a role in regulating actin filament assembly. It is a major constituent in the microvilli, which compose the brush border of epithelial cells forming absorptive surfaces of the intestinal and renal proximal tubular epithelia. In normal human tissue, villin is expressed by a limited number of simple epithelia of the gastrointestinal and urogenital tract. In tumor tissue, it is always expressed in colorectal cancer, hepatocellular carcinoma, endometrium cancer, as well as cancers of ovary and lung.Villin is a useful aid for classification of primary and metastatic colorectal carcinomas.

Rabbit Monoclonal Anti-Human
Vimentin-EP21



Colon stained with Anti-Vimentin

Clone	:	EP21
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Colon, Sarcoma

Catalog#	Catalog#	Catalog#
PR075-3ml (RTU)	PR075-6ml (RTU)	—
HAR075-3ml (RTU)	HAR075-6ml (RTU)	—
CR075-0.1ml (Conc)	CR075-0.5ml (Conc)	CR075-1ml (Conc)

TE

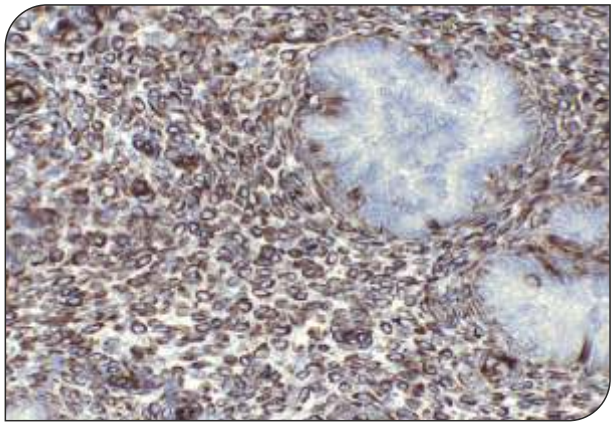
Vimentin is the most common member of the intermediate filament (IF) family and one of the main components in cytoskeleton structure. It is expressed during cell development and differentiation in a variety of mescencymal cells and cell types derived from mesoderm. Vimentin is essential for cell integrity and cytoskeletal stability. The reorganization of Vimentin, similar to all IF proteins, occurs during different stages of the cell cycle and cell signaling by a site specific phosphorylation (serine and threonine residues). In particular, p21-activated kinase (PAK) phosphorylates at Ser25, Ser38, Ser50, Ser65 and Ser72 which induces Vimentin specific reorganization. During cytokinesis, Vimentin is regulated by Rho-kinase (ROCK) and Aurora B through phosphorylation at Ser38 and Ser72.

E -EDTA BUFFER

TE -TRIS-EDTA BUFFER

C -CITRATE BUFFER

Mouse Monoclonal Anti-Human
Vimentin-V9



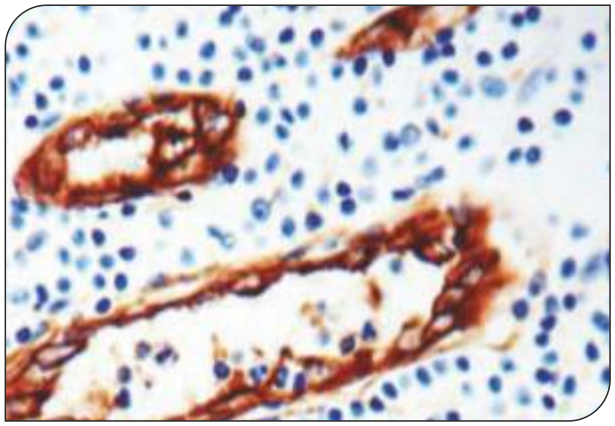
Endomyometrium stained with Anti-Vimentin

Clone	:	V9
Isotype	:	Mouse IgG1
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Tonsil, Kidney, Endomyometrium, Appendix

Catalog#	Catalog#	Catalog#
PM104-3ml (RTU)	PM104-6ml (RTU)	—
HAM104-3ml (RTU)	HAM104-6ml (RTU)	—
CM104-0.1ml (Conc)	CM104-0.5ml (Conc)	CM104-1ml (Conc)

TE Vimentin is ubiquitously expressed in mesenchymal cells such as fibroblasts, smooth muscle cells, and endothelium. Co-expression of Vimentin and Cytokeratin is indicative of epitheloid sarcoma. Vimentin expression may change as a tumor becomes more aggressive. The antibody is specific for Vimentin and does not recognize any other intermediate filaments, including desmin and glial fibrillary acidic protein (GFAP). It is used as part of an antibody panel (Eg. antibodies against other types of intermediate filaments) for differential diagnostics especially in soft tissue tumors. The antibody also serves as an internal control system to monitor any antigenic damage suffered by formalin sensitive epitopes on other diagnostically useful molecules.

Rabbit Polyclonal Anti-Human
von Willebrand Factor-Polyclonal



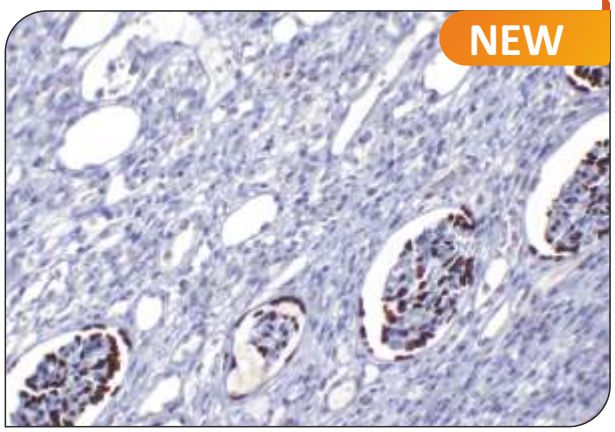
Tonsil Stained with Anti-v Willebrand Factor

Clone	:	Polyclonal
Isotype	:	NA
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm
Control	:	Tonsil, Colon

Catalog#	Catalog#	Catalog#
PP137-3ml (RTU)	PP137-6ml (RTU)	—
HAP137-3ml (RTU)	HAP137-6ml (RTU)	—
CP137-0.1ml (Conc)	CP137-0.5ml (Conc)	CP137-1ml (Conc)

E vWF, as known as Factor VIII related antigen (Factor VIII RA), is a sensitive marker of benign blood vessels and has been used for the study of angiogenesis in neoplasm such as breast cancer. vWF is seldom expressed in poorly differentiated vascular tumors. Therefore, anti-vWF antibody must be used in conjunction with other more sensitive markers of endothelial cells (E.g. CD34 and CD31) when identifying angiosarcomas. There is overlap between the expression of von Willebrand factor in vascular and lymphatic endothelium.

Rabbit Monoclonal Anti-Human
WT1-GUDP



Kidney stained with Anti-WT1

Clone	:	GUDP
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Ovarian Ca, Kidney

Catalog#	Catalog#	Catalog#
PR360-3ml (RTU)	PR360-6ml (RTU)	—
HAR360-3ml (RTU)	HAR360-6ml (RTU)	—
CR360-0.1ml (Conc)	CR360-0.5ml (Conc)	CR360-1ml (Conc)

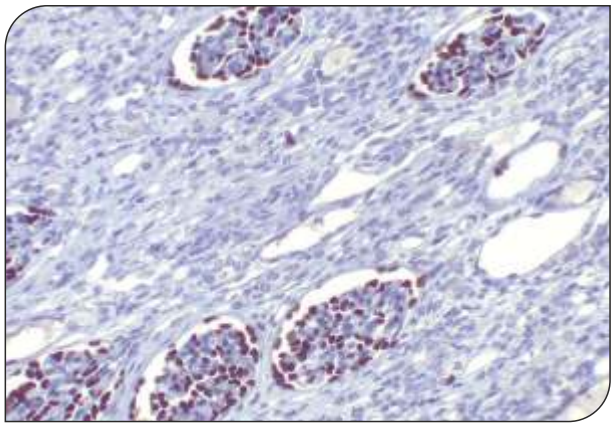
TE

The WT1 gene located at chromosome 11p13 codes for a transcription factor, a DNA-binding nucleoprotein, that plays a role primarily in the development of genitourinary organs. There are at least eight isoforms ranging between 52 and 62 kDa produced by a combination of alternative splicing and RNA editing. WT1 is synthesized and reside in the cytoplasm in an inactive form. When activated through phosphorylation it is translocated to the nucleus. WT1 influences cell proliferation by suppressing bcl-2 and regulating cadherin and p53. In normal epithelia, nuclear WT1 expression is largely restricted to ovary (surface epithelium and inclusion cysts) and fallopian tube, while WT1 is not found in endometrial or cervical epithelium. As regards nonepithelial cells, nuclear WT1 is found in mesothelium and some submesothelial stromal cells, stromal cells of the female genital tract, testicular non-germinal cells, and kidney (podocytes). In tumor tissues, WT1 is detected in tumor cells of Wilms' Tumor (also known as nephroblastoma) and mesothelioma. Additionally, WT1 expression has been found in ovarian serous carcinomas and some breast carcinomas. WT1 is particularly used for distinguishing malignant mesothelioma and ovarian serous carcinoma from non-serous carcinomas. As for malignant mesothelioma, calretinin and WT1 are superior to cytokeratin 5/6, N-cadherin and thrombomodulin. WT1 is also applicable for the differential diagnostic of small cell childhood tumors.

Rabbit Monoclonal Anti-Human
WT1-EP122

E TE

Wilms Tumor 1 (WT1) is a transcription factor that plays an important role in cellular development and cell survival. The WT1 gene encodes a tumor suppressor gene inactivated in Wilms Tumor, recently implicated in WNT signaling through the enhancement of cytoplasmic beta catenin (CTNNB1) degradation. WT1 has been demonstrated in mesenchymal derived cells and in Wilms Tumor. An antibody to WT1 is useful for the identification of malignant mesothelioma. A literature review of 88 published papers suggested that the sensitivity and specificity of WT1 for the identification of epithelioid mesothelioma was 77% and 96%, respectively.

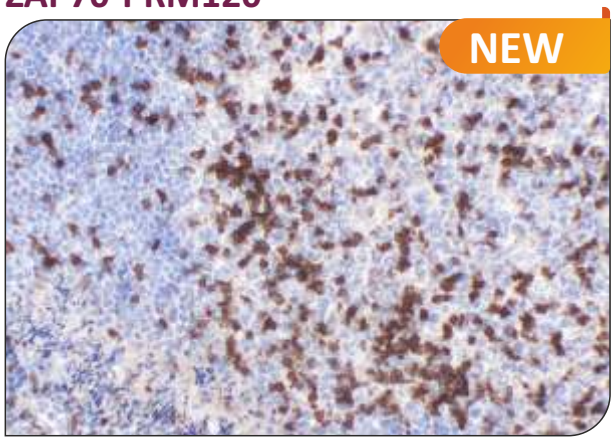


Kidney stained with Anti-Wilms Tumor1

Clone	:	EP122
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Nucleus
Control	:	Wilms Tumor, Mesothelioma, Kidney

Catalog#	Catalog#	Catalog#
PR076-3ml (RTU)	PR076-6ml (RTU)	—
HAR076-3ml (RTU)	HAR076-6ml (RTU)	—
CR076-0.1ml (Conc)	CR076-0.5ml (Conc)	CR076-1ml (Conc)

Rabbit Monoclonal Anti-Human
ZAP70-PRM120



Tonsil Stained with Anti-ZAP70

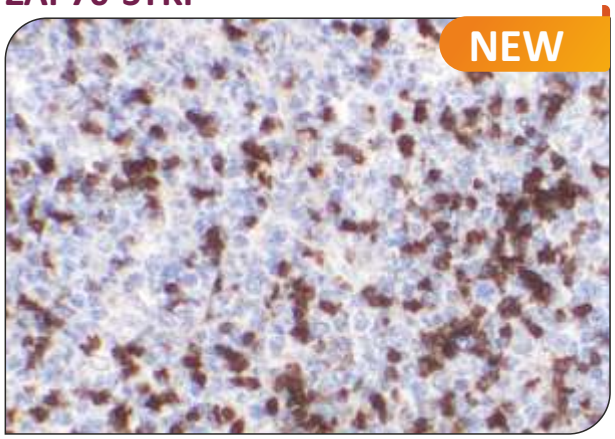
Clone	:	PRM120
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm and Nucleus
Control	:	Tonsil, CLL

Catalog#	Catalog#	Catalog#
PR321-3ml (RTU)	PR321-6ml (RTU)	—
HAR321-3ml (RTU)	HAR321-6ml (RTU)	—
CR321-0.1ml (Conc)	CR321-0.5ml (Conc)	CR321-1ml (Conc)

TE

ZAP-70, a Syk-family protein tyrosine kinase, plays a critical role in mediating T cell signal transduction in response to T cell antigen receptor (TCR) activation. It is primarily expressed in T cells and natural killer (NK) cells. Antibody toZAP-70 also labels mast cells, basophils and pro/pre B cells but not mature B cells. ZAP-70 antibody is useful in identification of the subtype of chronic lymphocytic leukemia (CLL). Anti-ZAP-70 is positive in CLL with mutation of the immunoglobulin heavy-chain variable region (IgVH) genes, but negative in CLL without IgVHmutation. ZAP-70 expression is associated with disease progression in CLL.

Rabbit Monoclonal Anti-Human
ZAP70-SYKP



Tonsil Stained with Anti-ZAP70

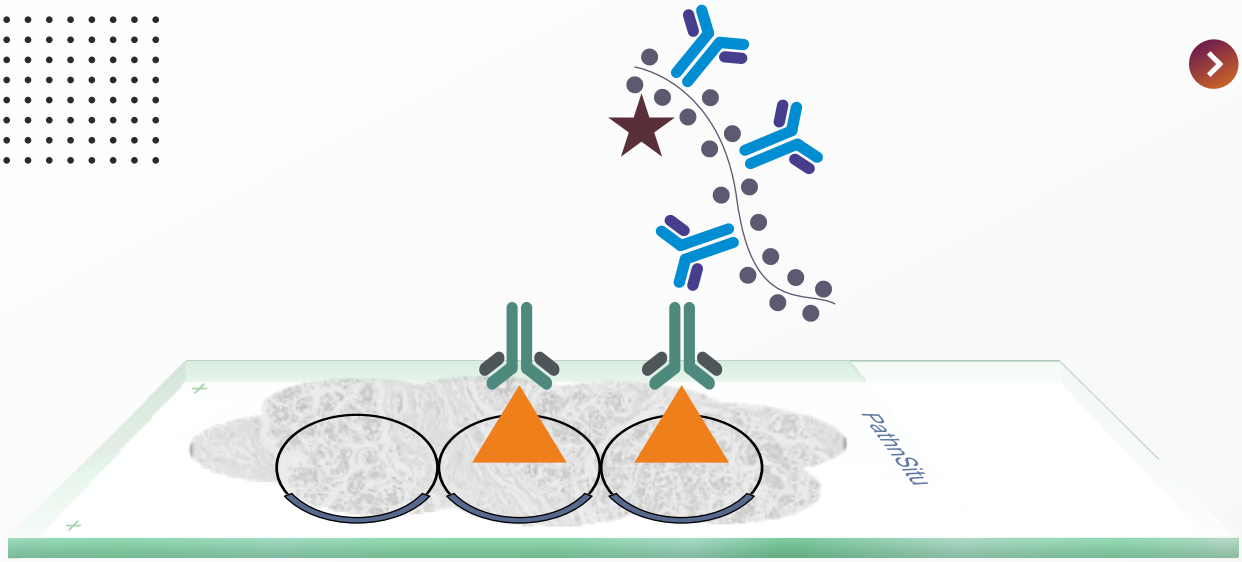
Clone	:	SYKP
Isotype	:	Rabbit IgG
Reactivity	:	Human, FFPE
Localization	:	Cytoplasm and Nucleus
Control	:	Tonsil, T-Cell Lymphoma

Catalog#	Catalog#	Catalog#
PR350-3ml (RTU)	PR350-6ml (RTU)	—
HAR350-3ml (RTU)	HAR350-6ml (RTU)	—
CR350-0.1ml (Conc)	CR350-0.5ml (Conc)	CR350-1ml (Conc)

TE

Zeta-associated protein-70 (ZAP-70) is a member of the Syk family of tyrosine kinases, a group of proteins that attach to the zeta chain components of T-cell receptors to signal downstream events involved in the regulation of cell function, proliferation, and death. Research suggests that the ZAP-70 protein may also play an important role in natural killer (NK) cell activation and early B-cell development; however, it is not expressed in most normal mature B-cells. Expression of ZAP-70 has been reported in various lymphomas, including mantle cell lymphoma, small lymphocytic lymphoma and marginal zone lymphoma. During thymocyte development, ZAP-70 promotes survival and cell-cycle progression of developing thymocytes before positive selection (when cells are still CD4/CD8 double negative). Additionally, ZAP-70-dependent signaling pathway may also contribute to primary B-cells formation and activation through B-cell receptor (BCR).

DETECTION SYSTEM



SALIENT FEATURES

- Micro Polymer Technology - Biotin Free
- Shorter Incubation Times
- Highly Specific and Sensitive
- Universal Kit for Mouse and Rabbit Primary Antibodies

POLYEXCEL HRP/DAB DETECTION SYSTEM

PathnSitu uniquely developed PolyExcel Micropolymer Detection System which is compatible with mouse and rabbit primary antibodies. The smaller size of micropolymer adheres to bind protein molecules strongly in shorter incubation times and results to give enhanced staining especially for nuclear markers.

This highly sensitive and specific PolyExcel One step and Two Step Detection Systems are non-biotin based detection system which significantly reduces or shows no background on tissues containing high levels of avidin & biotin. Eg: Kidney, Liver.

PRODUCT INFORMATION

Poly Excel HRP/ DAB Detection System - One Step

Catalog#	Pack Size
OSH001	6ml
OSH001	50ml
OSH001	100ml

PRODUCT INFORMATION

Poly Excel HRP/ DAB Detection System - Two Step

Catalog#	Pack Size
PEH002	6ml
PEH002	50ml
PEH002	100ml

Poly Excel HRP/ DAB Detection System - One Step

KIT CONTENTS
Poly Excel Peroxidase Quencher
Poly Excel Protein Block
Poly Excel Poly HRP
Poly Excel Stunn DAB Substrate Buffer
Poly Excel Stunn DAB Substrate Chromogen

Poly Excel HRP/ DAB Detection System - Two Step

KIT CONTENTS
Poly Excel Peroxidase Quencher
Poly Excel Target Binder
Poly Excel Poly HRP
Poly Excel Stunn DAB Substrate Buffer
Poly Excel Stunn DAB Substrate Chromogen

Poly Excel HRP/ DAB Detection System - One Step

Poly Excel HRP/ DAB Detection System - Two Step

ANCILARIES


Tris-EDTA Buffer - 50X Concentrate
PathnSitu Biotechnologies
www.pathnsitu.com
Immuno Wash Buffer - 25X Concentrate
Vol: 500ml
LOT
PathnSitu Biotechnologies
www.pathnsitu.com
PathnSitu
REAGENT BLOCKER
PathnSitu
UNIspread Microscope Slides
Positively Charged - Hydrophilic

ANCILLARIES

Ancillaries in immunohistochemistry such as primary antibody diluents, retrieval buffer, wash buffer etc. have always been critical in obtaining optimal staining. The pH of the buffer can impact staining quality from weak to no staining or over staining. Different components are involved in establishing high quality ancillary products, to begin with distilled water, purity of salts and chemicals used in the manufacturing of these reagents. PathnSitu offers high quality standardized ancillaries required for each and every lab condition to obtain the optimal IHC results.

Primary Antibody Diluent

Primary antibody diluent is generally used for the dilution of concentrated primary antibodies which are used in immuno-histochemical staining. It contains carrier protein and preservative which increases the stability of the protein. PathnSitu developed the primary antibody diluent with its own formula which increases the higher titrations of primary antibody (ies). Primary antibody diluent is color coded in green for easy identification.

Catalog#	Pack Size
PS010	100ml

Wash Buffer

Immunowash Buffer (pH 7.2-7.4, 25X)

Immunowash Buffer is designed and formulated for washing steps during immunohistochemical staining process. It acts as pH stabilizer and contains surfactant / non-ionic detergent which washes off the unbound antibodies. It is also helps in uniform spreading of the reagents and reduces background staining.

Catalog#	Pack Size
PS006	500ml (25X)
PS006	1 L (25X)

Phosphate Buffered Saline (PBS)

PBS Buffer (pH 7.4, 10X)

PBS Buffer is a pH-adjusted blend of phosphate buffers and saline solutions. Each 10X PBS solution is ready to use upon dilution to the desired concentration. It is employed to rinse off reagents from slides and to provide a medium for short-term storage of immunohistochemistry and immunofluorescence specimens between application of reagents.

Catalog#	Pack Size
PS028	100ml (10X)
PS028	500ml (10X)

Antigen Retrieval Buffers

PathnSitu offers low and high pH buffers designed for antigen retieval. The epitopes are masked / hidden during the processing of tissues in formalin and antigen retrieval buffers are used to break the methylene bridges formed between the side chain amino group of lysine at higher temperatures.

Citrate Buffer (pH 6.0, 50X)

Citrate buffer is a low pH acidic retrieval solution with pH 6.0. It is formulated to break the cross-linking of formaldehyde bonds and allows the easy access to epitopes in FFPE tissues. The pH remains stable during high heat and temperatures.

Catalog#	Pack Size
PS007	100ml (50X)
PS007	500ml (50X)

EDTA Buffer (pH 8.0, 50X)

EDTA buffer is a high pH retrieval solution with pH 8.0. The high pH helps in easy breakdown of formaldehyde bonds during the heat retrieval technique. It is non-toxic, non-flammable, odorless solution.

Catalog#	Pack Size
PS008	100ml
PS008	500ml

Tris EDTA Buffer (pH 9.0, 50X)

Tris EDTA buffer is a high pH alkaline retrieval solution with pH 9.0. The effects of pH on different formaldehyde fixed epitopes is due to the different constituent of amino acids which are linked to formaldehyde; hence they are more easily broken down in alkaline medium. It is mostly used for nuclear markers and tends to pick minimal background. Majority of the PathnSitu's primary antibodies are validated with Tris-EDTA buffer making it easy to use.

Catalog#	Pack Size
PS009	100ml (50X)
PS009	500ml (50X)

Catalog#	Pack Size
PS018	500ml (RTU)

Reagent Blocker (PAP Pen)

PAP Pen is a hydrophobic barrier marker pen which repels the aqueous based reagents. When encircled around the tissue, it lets the reagent reside on the tissue and prevents the loss of reagents. It also helps in uniform spreading of reagent on the tissue and saves cost per slide by minimizing the quantity of reagents used. PAP pen marking is insoluble in alcohol and acetone but soluble in xylene. Thus, it makes it perfect for use in immunohistochemical applications.

Catalog#	Pack Size
PS005	NA

Peroxidase Quencher

Endogenous peroxidase activity, which is physiologically present in many cells, such as erythrocytes, granulocytes, and neurons, which can react with the chromogen, thus producing a staining identical to specific immunoperoxidase. If this step is not performed, cells that have endogenous peroxidase (RBCs) tends to provide false positive results. Hydrogen Peroxide is an oxidizing agent and a quencher. Hence, pre-treatment with saturating amounts of amounts of hydrogen peroxide results in the irreversible inactivation of endogenous peroxidase there by providing a true positive result with appropriate quenching. This solution is suitable for both paraffin sections and frozen sections.

Catalog#	Pack Size
PS027	100ml
PS027	500ml

Chromogenic-Substrates

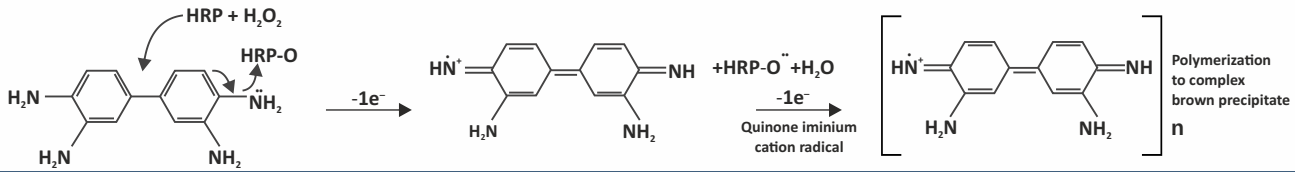
Visualization is an important tool in Immunohistochemistry process. The binding of primary and secondary antibodies in the process forms a coloured complex by the enzymatic reaction of horse radish peroxidase (HRP) and chromogenic substrate DAB ('3,3-Diaminobenzidine). The biochemical reaction converts the substrate into a pigment reaction product, which produces a brown colour.

We offer high sensitive StunnDAB Chromogen and Buffer for immunohistochemical application. It develops faster color and has longer stability of working solution which can last up to 5 days when stored at 2°-8° C. The chocolate/ golden brown color develops during the reaction which is distinguishable and appealing for microscopic examination when counter stained with hematoxylin.

Stunn DAB Kit is available with three different pack sizes which consists of DAB substrate buffer and chromogen.

Catalog#	Pack Size
PS001	10ml (10ml of Substrate Buffer and 1ml of DAB Chromogen)
PS001	60ml (60ml of Substrate Buffer and 5ml of DAB Chromogen)
PS001	100ml (100ml of Substrate Buffer and 8ml of DAB Chromogen)

DAB COMPLEX



Fast Freeze- Cryogel

Fast Freeze Cryogel is highly viscous, water soluble embedding medium used for frozen tissue sections. The highly viscous solution prevents over spread of gel and easily miscible with water content in the tissue(s). The gel contains dropper bottle with cone shaped dispenser which prevents from dropping of excess gel or spillage. Store the gel at room temperature.

Catalog#	Pack Size
FFG01	118ml Clear

Microscope Slides - Plain, Colored, Frosted Slides

Ground edged microscope slides are useful for many applications to use in Pathology, Cytology, Microbiology and Hematology laboratories. One edge of the slides are color painted to use for clear labelling and differentiation of specimens or departments.

We offer white color of glass slides for clear labelling and differentiation of specimens or departments.

Product	Catalog#	Pack Size
Plain Slides	PS7101-72	72 Slides Per Pack
Frosted Single Slides	PS7107-72	72 Slides Per Pack
Frosted Double Slides	PS7105-72	72 Slides Per Pack
Coloured Slides	PS7109-50	50 Slides Per Pack

Positively Charged Slides

Tissue loss during immunohistochemical staining procedures may occur due to weak interaction of a tissue sample with glass surfaces. Histological methods for preparing tissue sections for microscopic examination commonly use glass slides with a modified surface chemistry to enhance tissue adhesion. Such surface modifications impart a net positive charge to the slide by treating with reagents such as aminosilane, poly L lysine or other proprietary chemistries. However, even with such surface modifications a proportion of tissues subjected to HIER may get lifted, folded, damaged, or completely detached from slides.

Although partial lifting or folding of tissue sections may not significantly impact morphological assessment but the IHC results may be severely compromised, particularly for the small samples such as needle biopsies.

At PathnSitu we compared the ability of hydrophobic and hydrophilic slides in two functional areas common in IHC tissue retention and reagent dispersal. Slides that display superior tissue adhesion ability and superior reagent dispersant could be of great benefit to laboratories seeking to minimize incidences of tissue samples loss and, as an added benefit could reduce laboratory reagent cost as greater the reagent dispersal, lesser will be reagent used. We offer two different kinds of positively charged slides for Immunohistochemistry, Immuno fluorecence, FISH, ISH and Special Stains.

Product	Catalog#	Pack Size
Positively Charged Slides	PS011	72 slides per pack
Positively Charged Slides - Hydrophilic	PS016	72 slides per pack

1% Eosin Y Stock Solution (Alcohol Based)

The staining mechanism behind the H&E staining is a physico-chemical process. In the first step, the positively charged nuclear dye (hematoxylin) binds to the negatively charged phosphate groups of the nucleic acid of the cell nucleus. The nuclei will be dyed dark blue to dark violet. The second step is the counterstaining with negatively charged anionic Eosin Y, a xanthene dye. Eosin binds to the positively charged plasma proteins. Cytoplasm and intercellular substances are stained pink to red, while erythrocytes will appear with yellow to orange color.

Catalog#	Pack Size
PS029	125ml
PS029	250ml
PS029	500ml
PS029	1Litre
PS029	2.5Litre

Hematoxylin

Hematoxylin is arguably the most common nuclear counterstain used when employing an enzyme /chromogen detection system. Hematoxylin alone (or more accurately its oxidation product, hematin) is anionic and therefore does not have much affinity for DNA. Mordants are iron salts, namely those of iron, aluminum, tungsten, and lead. Mordants combine with hematin, resulting in a positively charged dye-mordant complex, thus allowing it to bind to anionic chromatin. Alum (aluminum mordant) hematoxylins can be used either progressively or regressively.

With progressive hematoxylins (such as Mayer's, Carazzi's, and Gill's), tissue or cells are incubated in hematoxylin until the desired degree of nuclear staining is achieved, before being blued. In comparison, in the case of regressive hematoxylins (such as Harris's), tissues or cells are incubated until a degree of overstaining is achieved, before having some of the excess hematoxylin removed by immersion in an acid solution, such as 1% acid alcohol. This process is known as differentiation.

Progressive hematoxylins are therefore more convenient to use than regressive, due to the absence of a differentiation step and the resulting compatibility with alcohol-soluble enzyme/substrate end products, such as those produced by HRP and AEC.

PathnSitu offers three different kinds of Hematoxylin staining solutions: Harris Hematoxylin, Mayer's Hematoxylin, Modified Mayer's Hematoxylin

Harris Hematoxylin

Catalog#	Pack Size
PS021	100ml
PS021	500ml
PS021	1Litre
PS021	2.5Litre

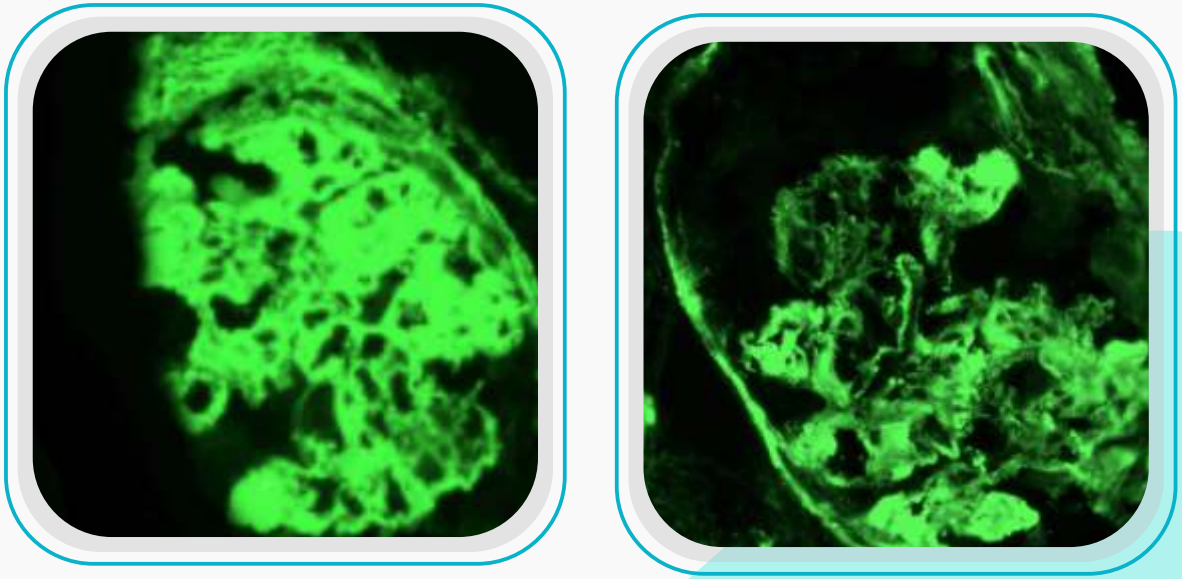
Mayer's Hematoxylin

Catalog#	Pack Size
PS014	100ml
PS014	500ml
PS014	1Litre
PS014	2.5Litre

Modified Mayer's Hematoxylin

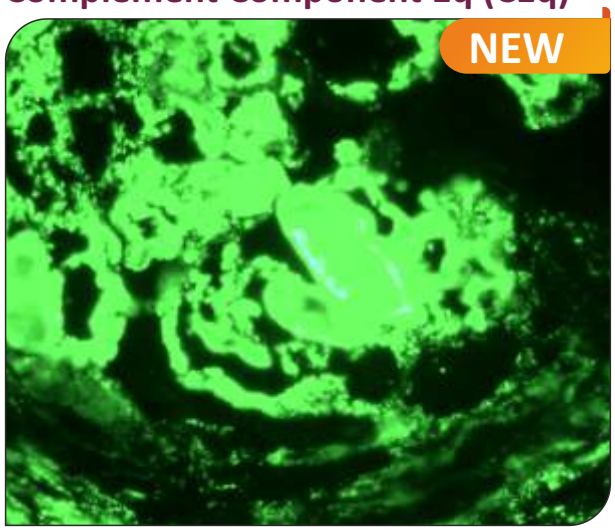
Catalog#	Pack Size
PS020	100ml
PS020	500ml
PS020	1Litre
PS020	2.5Litre

IMMUNOFLUORESCENCE (IF)



Goat Anti-Human Polyclonal Antibody

Complement Component 1q (C1q)



Kidney stained with C1q

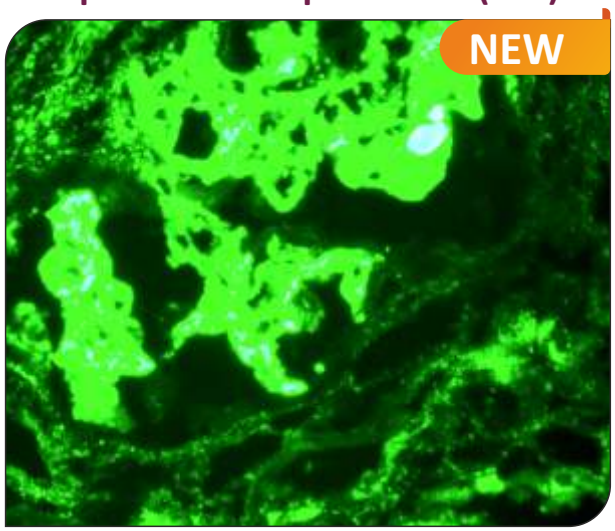
Clone	:	Polyclonal
Reactivity	:	Human, Frozen
Localization	:	Cytoplasm and Membrane

Catalog#	Pack Size
FPS007-Q	1ml Conc
FPS007-Q	0.5ml Conc

The complement component 1q (C1q) is a protein complex involved in the complement system, which is part of the innate immune system. C1q together with C1r and C1s form the C1 complex. Antibodies of the adaptive immune system can bind antigen, forming an antigen-antibody complex. When C1q binds antigen antibody complexes, the C1 complex becomes activated. Activation of the C1 complex initiates the classical complement pathway of the complement system. C1q nephropathy is a rare glomerular disease with characteristic mesangial C1q deposition noted on IHC or IF microscopy. It is histologically defined and poorly understood. Light microscopic features are heterogeneous and comprise minimal change disease (MCD), focal segmental glomerulosclerosis (FSGS), and proliferative glomerulonephritis.

Goat Anti-Human Polyclonal Antibody

Complement Component 3c (C3c)



Kidney stained with C3c

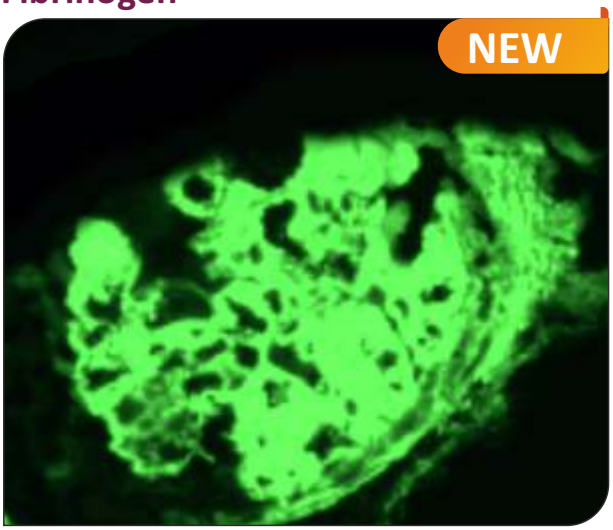
Clone	:	Polyclonal
Reactivity	:	Human, Frozen
Localization	:	Cytoplasm and Membrane

Catalog#	Pack Size
FPS006-C	1ml Conc
FPS006-C	0.5ml Conc

Complement component 3, often simply called C3, is a protein of the immune system. It plays a central role in the complement system and contributes to innate immunity. C3 glomerulopathy was recently coined to describe renal biopsy appearances characterized by the presence of glomerular deposits composed predominantly of C3 in the absence of significant amounts of Ig. The presence of C3c antibody expression in the absence of Ig suggests activation of complement by antibody-independent pathways, typically the alternative pathway, and many patients with this type of renal lesion have evidence of genetic or acquired alternative pathway dysregulation.

Goat Anti-Human Polyclonal Antibody

Fibrinogen



Kidney stained with Fibrinogen

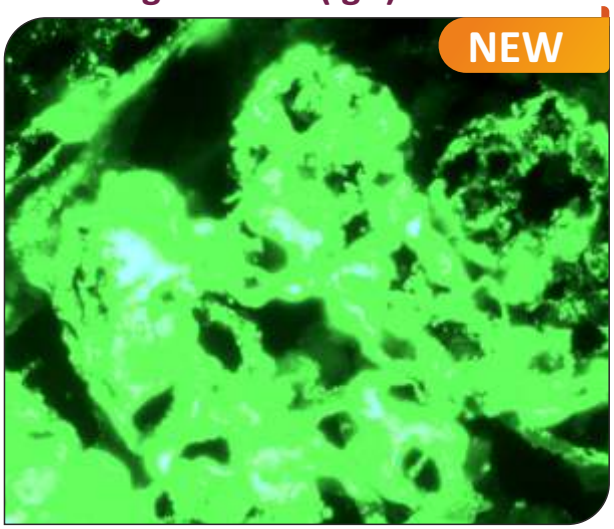
Clone	:	Polyclonal
Reactivity	:	Human, Frozen
Localization	:	Cytoplasm

Catalog#	Pack Size
FPS008-F	1ml Conc
FPS008-F	0.5ml Conc

Fibrinogen (factor I) is a glycoprotein that circulates in the blood of vertebrates. During tissue and vascular injury, it is converted enzymatically by thrombin to fibrin and subsequently to a fibrin-based blood clot. Fibrinogen functions primarily to occlude blood vessels and thereby stop excessive bleeding. Fibrin also mediates blood platelet and endothelial cell spreading, tissue fibroblast proliferation, capillary tube formation, and angiogenesis and thereby functions to promote tissue revascularization, wound healing, and tissue repair.

Goat Anti-Human Polyclonal Antibody

Immunoglobulin A (IgA)



Kidney stained with IgA

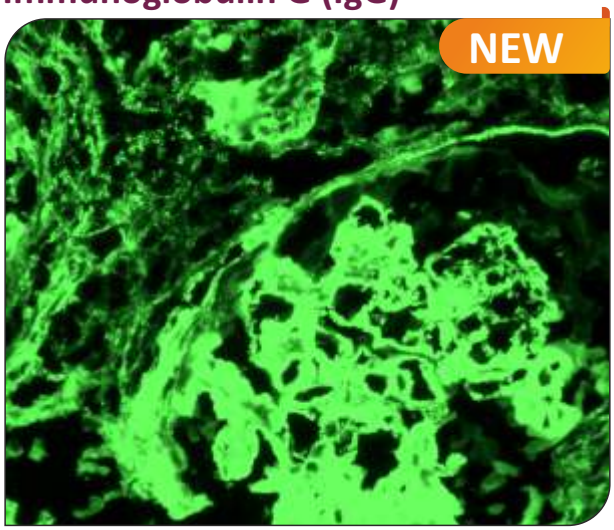
Clone	:	Polyclonal
Reactivity	:	Human, Frozen
Localization	:	Cytoplasm

Catalog#	Pack Size
FPS005-A	1ml Conc
FPS005-A	0.5ml Conc

Immunoglobulin A (IgA) is the main immunoglobulin in mucous secretions, including tears, saliva, and colostrum, as well as respiratory, intestinal, prostatic, and vaginal secretions. It is also found in small amounts in blood. Because it is resistant to degradation by enzymes, secretory IgA provides protection against microbes proliferating in body secretions, especially those of the digestive and respiratory tracts. IgA antibody reacts with surface immunoglobulin IgA alpha chains. It is extremely useful when identifying Acute Leukemias, IgA Myelomas, Plasmacytomas, and B-cell lineage derived Hodgkin's Lymphomas.

Goat Anti-Human Polyclonal Antibody

Immunoglobulin G (IgG)



Kidney stained with IgG

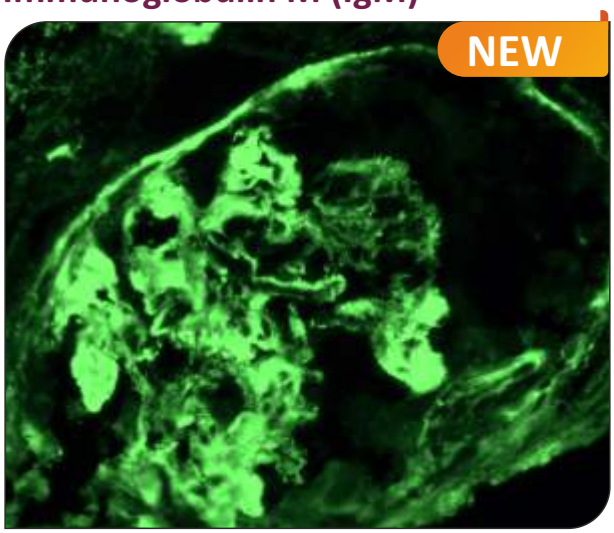
Clone	:	Polyclonal
Reactivity	:	Human, Frozen
Localization	:	Cytoplasm

Catalog#	Pack Size
FPS004-G	1ml Conc
FPS004-G	0.5ml Conc

IgG is a monomeric immunoglobulin, comprised of two heavy chains and two light chains. This is the most abundant immunoglobulin and is approximately equally distributed in blood and tissue liquids, constituting 75% of serum immunoglobulins in humans. This is the only isotype that can pass through the placenta and bind to many kinds of pathogens. IgG protects the body against them by complement activation (classic pathway), opsonization for phagocytosis and neutralization of their toxins.

Goat Anti-Human Polyclonal Antibody

Immunoglobulin M (IgM)



Kidney stained with IgM

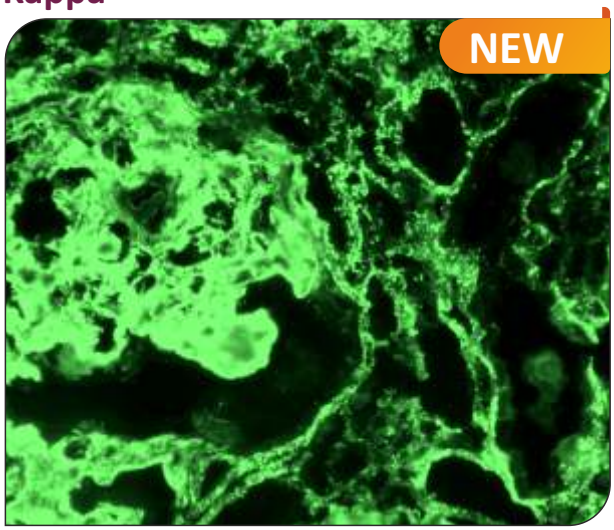
Clone	:	Polyclonal
Reactivity	:	Human, Frozen
Localization	:	Cytoplasm

Catalog#	Pack Size
FPS003-M	1ml Conc
FPS003-M	0.5ml Conc

IgM forms polymers where multiple immunoglobulins are covalently linked together with disulfide bonds, normally as a pentamer or occasionally as a hexamer. It has a large molecular mass of approximately 900 kDa (in its pentamer form). In germline cells, the gene segment encoding the constant region of the heavy chain is positioned first among other constant region gene segments. For this reason, IgM is the first immunoglobulin expressed by mature B-cells. IgM antibody reacts with surface immunoglobulin IgM mu chains. IgM is one of the predominant surface immunoglobulins on B-lymphocytes, and is useful when identifying Leukemias, Plasmacytomas, and B-cell lineage derived Hodgkin's Lymphomas.

Goat Anti-Human Polyclonal Antibody

Kappa



Kidney stained with Kappa

Clone	:	Polyclonal
Reactivity	:	Human, Frozen
Localization	:	Cytoplasm

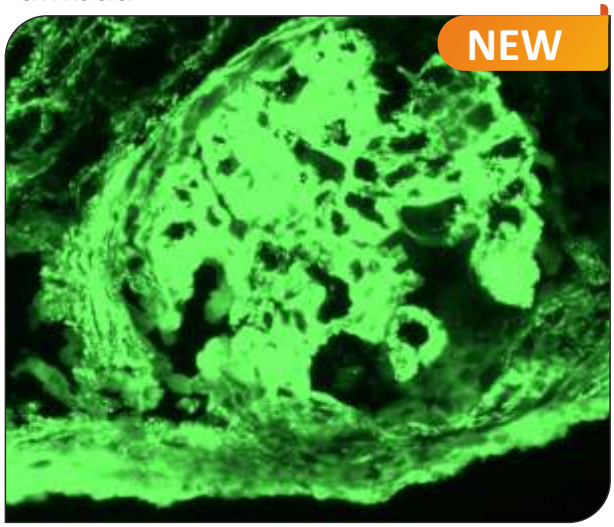
Catalog#	Pack Size
FPS001-K	1ml Conc
FPS001-K	0.5ml Conc

Kappa antibody detects surface immunoglobulin on normal and neoplastic B-cells. In paraffinembedded tissue, Kappa exhibits strong staining of kappa-positive plasma cells and cells that have absorbed exogenous immunoglobulin. When studying B-cell neoplasms, the determination of light-chain ratios remains the centerpiece. This is sound reasoning because most B-cell Lymphomas express either Kappa or Lambda light chains, whereas reactive proliferations display a mixture of Kappa and Lambda-positive cells. If only a single light-chain type is detected, a lympho-proliferative disorder is very likely. Monoclonality is determined by a Kappa-Lambda ratio greater than or equal to 3:1, a Lambda-Kappa ratio greater than or equal to 2:1, or a monoclonal population of 75% or more of the total population.

In IgG-dominant immune complex-mediated glomerulonephritis, there are multiple pathological findings that strongly suggest the diagnosis of Lupus Nephritis including immunofluorescence staining for IgG, IgM, IgA, Kappa or Lambda, C3 and C1.

Goat Anti-Human Polyclonal Antibody

Lambda



Kidney stained with Lambda

Clone	:	Polyclonal
Reactivity	:	Human, Frozen
Localization	:	Cytoplasm

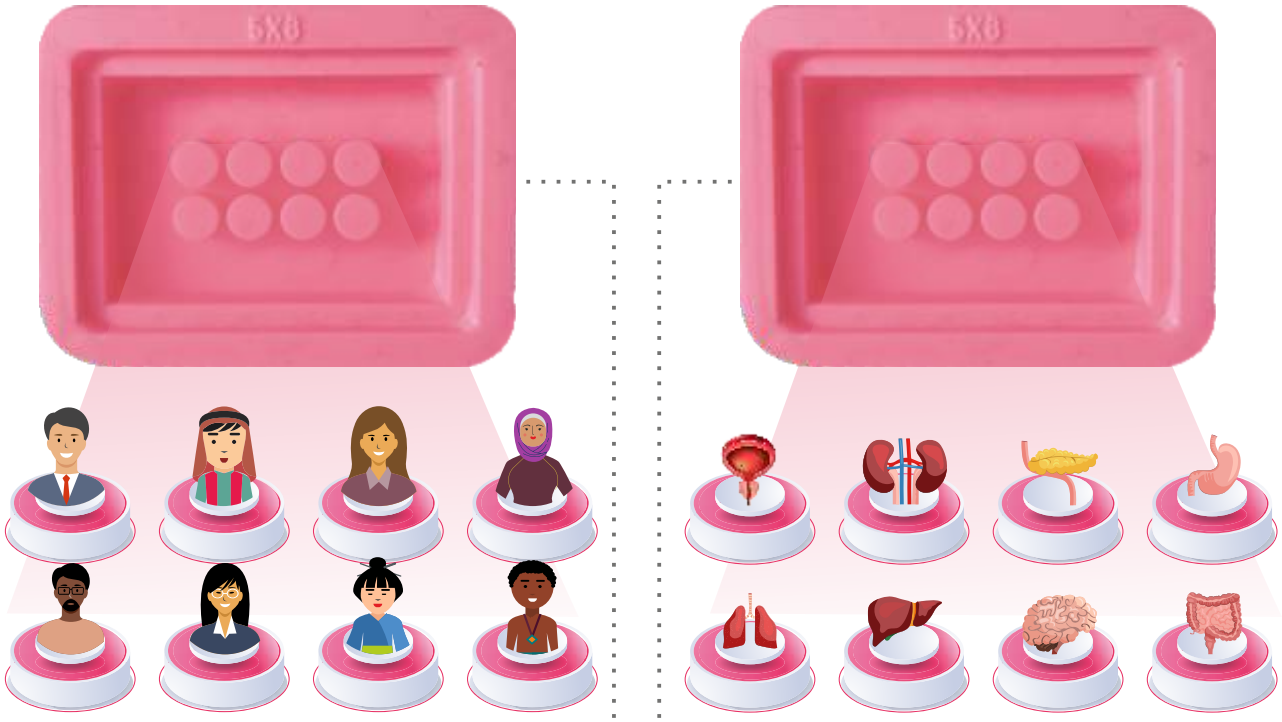
Catalog#	Pack Size
FPS002-L	1ml Conc
FPS002-L	0.5ml Conc

Lambda antibody detects surface immunoglobulin on normal and neoplastic B-cells. Lambda staining is seen in B-cell follicles of human lymphoid tissue. When studying B-cell neoplasms, the determination of light chain ratios remains the centerpiece. This is sound reasoning because most B-cell Lymphomas express either kappa or lambda light chains, whereas reactive proliferations display a mixture of kappa and lambda-positive cells. If only a single light-chain type is detected, a lymphoproliferative disorder is very likely. Monoclonality is determined by a kappa-lambda ratio greater than or equal to 3:1, a lambda-kappa ratio greater than or equal to 2:1, or a monoclonal population of 75% or more of the total population. In IgG-dominant immune complex-mediated glomerulonephritis, there are multiple pathological findings that strongly suggest the diagnosis of Lupus Nephritis including immunofluorescence staining for IgG, IgM, IgA, Kappa or Lambda, C3 and C1.

TISSUE MICROARRAY

TISSUE MICROARRAY

NEW



Multi Population Array

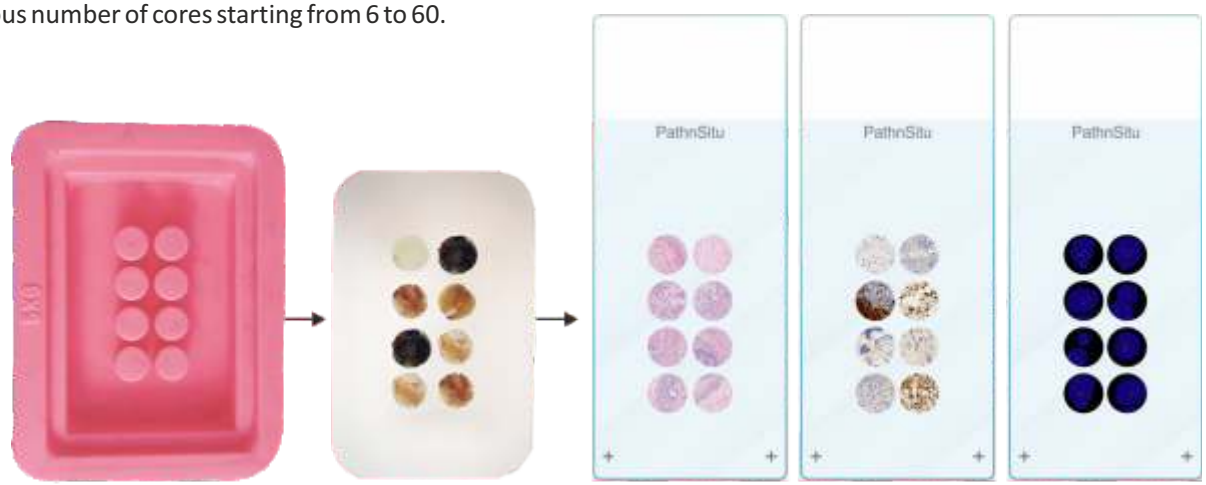
Multi Organ Array

- Silicon Molds
- Help in Conservation of Tissues
- High Grade Stainless Steel Punches/Needles
- Available in Various Sizes- 2mm, 3mm, 4mm & 5mm
- Cost Effective Technique

Tissue Microarray

Tissue microarrays are paraffin blocks produced by extracting cylindrical tissue cores from different paraffin donor blocks and re-embedding these into a single recipient (microarray) block at defined array coordinates. Using this technique, multiple tissue samples can be arrayed into a single paraffin block. The use of tissue microarrays in combination with special applications like immunohistochemistry, immunofluorescence and fluorescent in-situ hybridization etc.. has been a preferred method to study and validate cancer biomarkers, drug discovery, product quality control in various diseased patient cohorts. The possibility to assemble a large number of representative diseased samples from a defined patient cohort that also has a corresponding clinical database, provides a powerful resource to study how different expressions of proteins/biomarkers and patterns correlate with different clinical parameters. Since patient samples are assembled into the same block, sections can be stained with the same protocol to avoid experimental variability and technical errors. Clinical patient cohorts and corresponding tissue microarray sets have been used to study diagnostic, prognostic and treatment predictive cancer biomarkers, molecular pathology based applications in most tissue related studies.

PathnSitu offers a wide range of tissue micro array molds of multiple core sizes of 2mm, 3mm, 4mm and 5mm with various number of cores starting from 6 to 60.



Mold **Block** **H&E** **IHC** **FISH**

Multi Protocol Validation with Multiple Tissues

Advantages of Tissue Microarray

- **Research:** To study protein expression, cytogenetics, genotypic and phenotypic marker identification, pathologists/ scientists need patient by patient and organ by organ analysis, thus enabling them to analyze samples on a much larger level.
- **Tissue Conservation:** TMA can improve conservation of tissue resources and experimental reagents. It helps to improve internal experimental controls.
- **Multiple Staining:** Tissue microarrays supports staining techniques like H&E, IHC, FISH and *In situ* hybridization.
- **Cost Effective Technique:** As the analysis takes place on a single slide, the protocol steps involved in the slide staining remains the same. Hence, Tissue microarrays for a typical cohort analysis use less reagents while enabling more assays.
- **Parallel *In situ* Analysis:** One can increase number of samples per experiment and use it for large-scale, massively parallel *in situ* analysis of patients.

High throughput nature of the tissue microarray experiments make them a preferred choice for studying cancer biomarker and drug discovery.

Ordering Information

As per the requirement, kindly choose by marking a tick mark (✓) against the molds and punches information given below. Take a snapshot of your requirement and submit your enquiry to **customerservice@pathnsitu.com.**

Product Details

Molds

Core Size	No. of Cores	Quantity
5.0mm	16 (4*4) ☐	_____
5.0mm	12 (3*4) ☐	_____
5.0mm	8 (2*4) ☐	_____
5.0mm	4 (4*1) ☐	_____

Core Size	No. of Cores	Quantity
4.0mm	24 (6*4) ☐	_____
4.0mm	18 (3*6) ☐	_____
4.0mm	12 (3*4) ☐	_____
4.0mm	6 (2*3) ☐	_____

Core Size	No. of Cores	Quantity
2.0 mm	60 (6*10) ☐	_____
2.0 mm	50 (5*10) ☐	_____
2.0 mm	40 (5*8) ☐	_____
2.0 mm	30 (5*6) ☐	_____
2.0 mm	24 (4*6) ☐	_____
2.0 mm	18 (3*6) ☐	_____
2.0 mm	12 (3*4) ☐	_____
2.0 mm	6 (2*3) ☐	_____

Core Size	No. of Cores	Quantity
3.0mm	32 (8*4) ☐	_____
3.0mm	24 (3*4) ☐	_____
3.0mm	18 (3*6) ☐	_____
3.0mm	12 (3*4) ☐	_____
3.0mm	6 (2*3) ☐	_____

Punch / Needles

☐ _____

☐ _____

☐ _____

☐ _____

Complete Kit ☐

Enable Your Research With PathnSitu Tissue Microarray Kit

PathnSitu Biotechnologies

Your Advanced Tissue Pathology Partner

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