abcam

Product datasheet

Anti-Cytokeratin 20 antibody [EPR1622Y] - Cytoskeleton Marker ab76126

重组 RabMAb

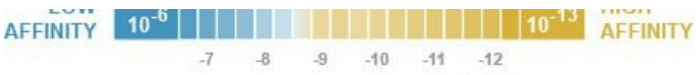
17 Abreviews 46 References 14 图像

概述

产品名称	Anti-Cytokeratin 20抗体[EPR1622Y] - Cytoskeleton Marker
描述	兔单克隆抗体[EPR1622Y] to Cytokeratin 20 - Cytoskeleton Marker
宿主	Rabbit
特异性	The immunogen of this antibody is 73% homolog with Mouse-Cytokeratin 20. This antibody gives positive results for mouse samples in Western Blot only. Therefore we do not recommend this antibody for mouse samples and do not cover mouse with our Abpromise guarantee.
经测试应用	**适用于:** Flow Cyt (Intra), ICC/IF, WB, IHC-P
种属反应性	**与反应:** Human **预测可用于:** Rat, Goat, Pig, Common marmoset
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
阳性对照	WB: HT-29, DLD-1 and Human small intestine cell lysates. IHC-P: Human colon adenocarcinoma and urinary bladder transitional carcinoma tissue. ICC: HT-29 cells. Flow Cyt (intra): LoVo cells.
常规说明	This product is a recombinant monoclonal antibody, which offers several advantages including: - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information **see here**. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

性能

形式	Liquid
存放说明	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
解离常数 (K_D)	K_D = 3.10 x 10^{-11} M



Learn more about K_D

存储溶液	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant
纯度	Protein A purified
克隆	单克隆
克隆编号	EPR1622Y
同种型	IgG

应用

The Abpromise guarantee Abpromise™承诺保证使用ab76126于以下的经测试应用

"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

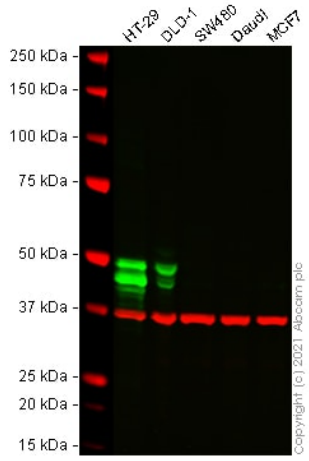
应用	Ab评论	说明
Flow Cyt (Intra)		1/1000. **ab172730** - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
ICC/IF	★★★★☆ (3)	1/100 - 1/500.
WB		1/10000 - 1/50000. Predicted molecular weight: 48 kDa.
IHC-P	★★★★★ (12)	1/100 - 1/250. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

靶标

功能	Plays a significant role in maintaining keratin filament organization in intestinal epithelia. When phosphorylated, plays a role in the secretion of mucin in the small intestine.
组织特异性	Expressed predominantly in the intestinal epithelium. Expressed in luminal cells of colonic mucosa. Also expressed in the Merkel cells of keratinized oral mucosa; specifically at the tips of some rete ridges of the gingival mucosa, in the basal layer of the palatal mucosa and in the taste buds of lingual mucosa.
序列相似性	Belongs to the intermediate filament family.
发展阶段	First detected at embryonic week 8 in individual 'converted' simple epithelial cells of the developing intestinal mucosa. In later fetal stages, synthesis extends over most goblet cells and a variable number of villus enterocytes. In the developing gastric and intestinal mucosa, expressed in all enterocytes and goblet cells as well as certain 'low-differentiated' columnar cells, whereas the neuroendocrine and Paneth cells are negative.
翻译后修饰	Hyperphosphorylation at Ser-13 occurs during the early stages of apoptosis but becomes less prominent during the later stages. Phosphorylation at Ser-13 also increases in response to stress brought on by cell injury.

	Proteolytically cleaved by caspases during apoptosis. Cleavage occurs at Asp-228.
细胞定位	Cytoplasm.

图片



Western blot - Anti-Cytokeratin 20 antibody [EPR1622Y] - Cytoskeleton Marker (ab76126)

All lanes : Anti-Cytokeratin 20 antibody [EPR1622Y] - Cytoskeleton Marker (ab76126) at 1/10000 dilution

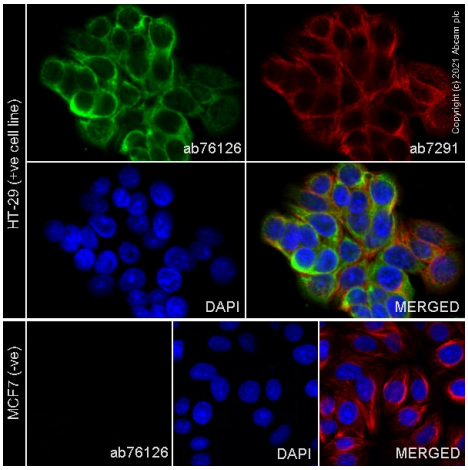
Lane 1 : HT-29 cell lysate
Lane 2 : DLD-1 cell lysate
Lane 3 : SW480 cell lysate
Lane 4 : Daudi cell lysate
Lane 5 : MCF7 cell lysate

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 48 kDa
Additional bands at: 45 kDa. We are unsure as to the identity of these extra bands.

False colour image of Western blot: Anti-Cytokeratin 20 antibody [EPR1622Y] - Cytoskeleton Marker staining at 1/10000 dilution, shown in green; Mouse anti-GAPDH antibody [6C5] (**ab8245**) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab76126 was shown to bind specifically to Cytokeratin 20. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3 % milk in TBS-0.1 % Tween® 20 (TBS-T) before incubation with primary antibodies overnight at 4°C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed (**ab216776**) at 1/20000 dilution.

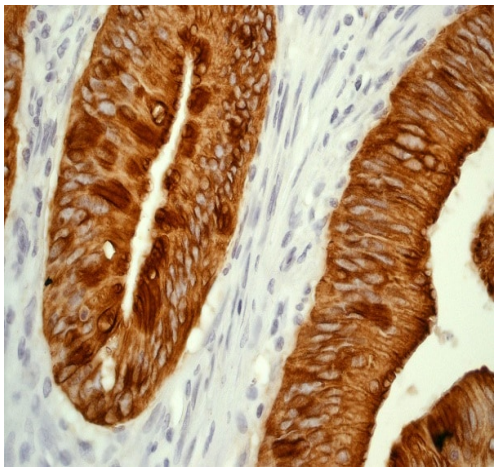


Immunocytochemistry/ Immunofluorescence - Anti-Cytokeratin 20 antibody [EPR1622Y] - Cytoskeleton Marker (ab76126)

ab76126 staining Cytokeratin 20 in HT-29 cells, with negative expression in MCF7 cells. The cells were fixed with 100% methanol (5 min), permeabilised with 0.1% Triton x-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at +4°C with ab76126 at 0.1 µg/ml and **ab7291**, Mouse monoclonal [DM1A] to alpha Tubulin at 0.5 µg/ml. Cells were then incubated with **ab150081**, Goat polyclonal Secondary Antibody to Rabbit IgG - H&L (Alexa Fluor® 488), pre-adsorbed at 1/1000 dilution (shown in green) and **ab150119**, Goat polyclonal Secondary Antibody to Mouse IgG - H&L (Alexa Fluor® 647), pre-adsorbed at 1/1000 dilution (shown in red). Nuclear DNA was labelled with DAPI (shown in blue).

Image was acquired with a confocal microscope (Leica-Microsystems TCS SP8) and a single confocal section is shown.

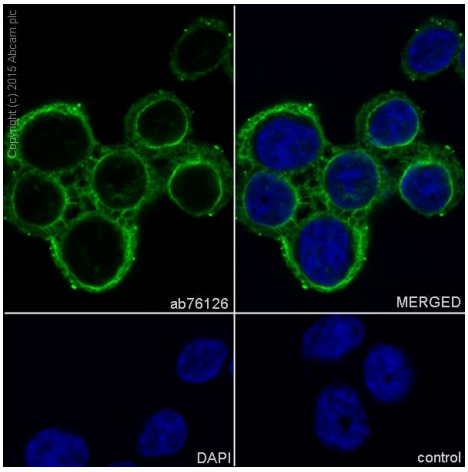
This product also work with 4% formaldehyde (10 min) fixation under the same testing conditions.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin 20 antibody [EPR1622Y] - Cytoskeleton Marker (ab76126)

ab76126 at 1/100 dilution staining Cytokeratin 20 in human colon adenocarcinoma by Immunohistochemistry, Paraffin-embedded tissue.

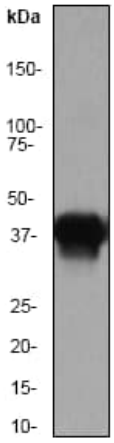
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-Cytokeratin 20 antibody [EPR1622Y] (ab76126)

Immunocytochemistry/Immunofluorescence analysis of HT-29 (human colorectal adenocarcinoma) cells labelling Cytokeratin 20 with purified ab76126 at 1/500. Cells were fixed with 100% methanol. **ab150077**, Alexa Fluor® 488-conjugated goat anti-rabbit IgG (1/1000) was used as the secondary antibody. Nuclei were counterstained with DAPI (blue).

Secondary Only Control: PBS was used instead of the primary antibody as the negative control.



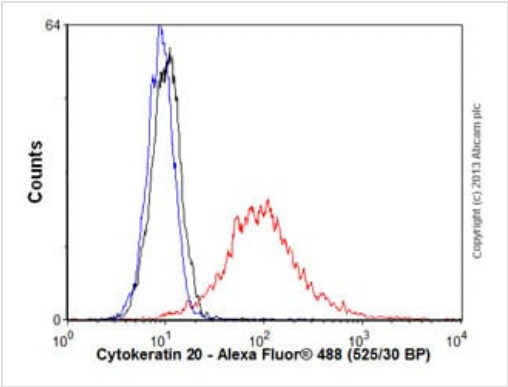
Western blot - Anti-Cytokeratin 20 antibody [EPR1622Y] (ab76126)

Anti-Cytokeratin 20 antibody [EPR1622Y] - Cytoskeleton Marker (ab76126) at 1/50000 dilution + human small intestine lysate at 10 µg

Secondary
goat anti-rabbit-HRP at 1/1000 dilution

Predicted band size: 48 kDa
Observed band size: 44 kDa

Primary: ab76126, 1/50000 dilution
Sample: human small intestine lysate, 10 ug
Secondary: goat anti-rabbit-HRP, 1/1000 dilution



Flow Cytometry (Intracellular) - Anti-Cytokeratin 20 antibody [EPR1622Y] - Cytoskeleton Marker (ab76126)

Overlay histogram showing LoVo (Human colorectal adenocarcinoma cell line) cells stained with ab76126 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Triton X-100 for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab76126, 1/1000 dilution) for 30 min at 22°C. The secondary antibody used was Alexa Fluor® 488 goat anti-rabbit IgG (H&L) (**ab150077**) at 1/2000 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (1µg/1x10^6 cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter.

Western blot - Anti-Cytokeratin 20 antibody [EPR1622Y] (ab76126)

Anti-Cytokeratin 20 antibody [EPR1622Y] - Cytoskeleton Marker (ab76126) at 1/50000 dilution + Recombinant Human Cytokeratin 20 protein (**ab73640**) at 0.01 µg

Secondary

Goat Anti-Rabbit IgG H&L (HRP) preadsorbed (**ab97080**) at 1/5000 dilution

Developed using the ECL technique.

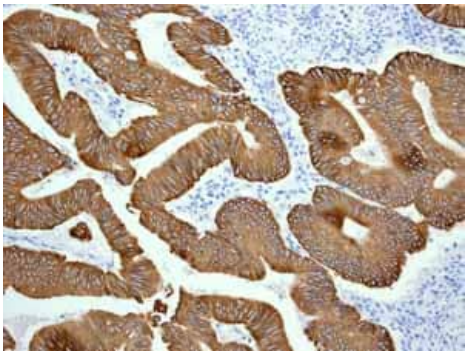
Performed under reducing conditions.

Predicted band size: 48 kDa

Exposure time: 20 seconds

Primary: ab76126, 1/50000 dilution
Sample: **ab73640**, 0.01 ug

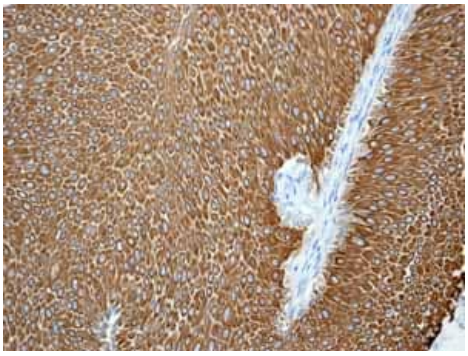
Secondary: **ab97080**, 1/5000 dilution



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin 20 antibody [EPR1622Y] - Cytoskeleton Marker (ab76126)

ab76126 showing positive staining in human colonic adenocarcinoma tissue.

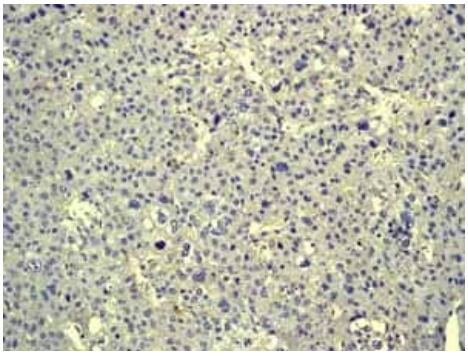
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin 20 antibody [EPR1622Y] - Cytoskeleton Marker (ab76126)

ab76126 showing positive staining in human urinary bladder transitional carcinoma tissue.

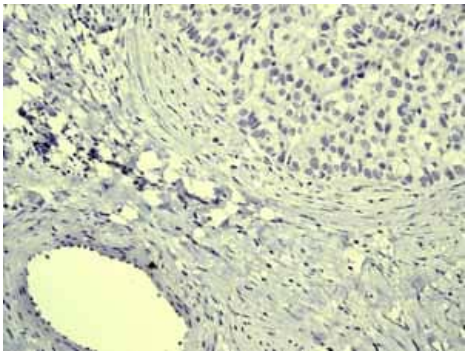
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin 20 antibody [EPR1622Y] - Cytoskeleton Marker (ab76126)

ab76126 showing **negative staining** in human hepatocellular carcinoma tissue.

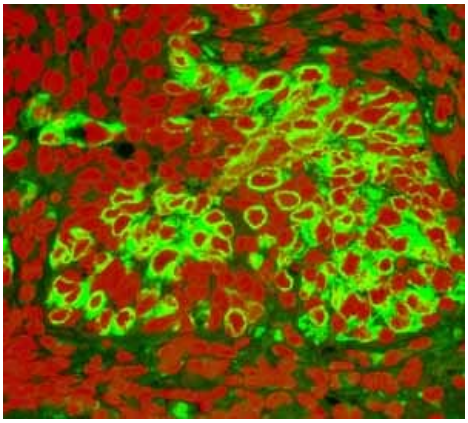
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin 20 antibody [EPR1622Y] - Cytoskeleton Marker (ab76126)

ab76126 showing **negative staining** in human breast carcinoma tissue.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin 20 antibody [EPR1622Y] - Cytoskeleton Marker (ab76126)

Fluorescent immunohistochemical analysis of paraffin-embedded human colonic adenocarcinoma tissue using ab76126. Green-CK20 red-PI

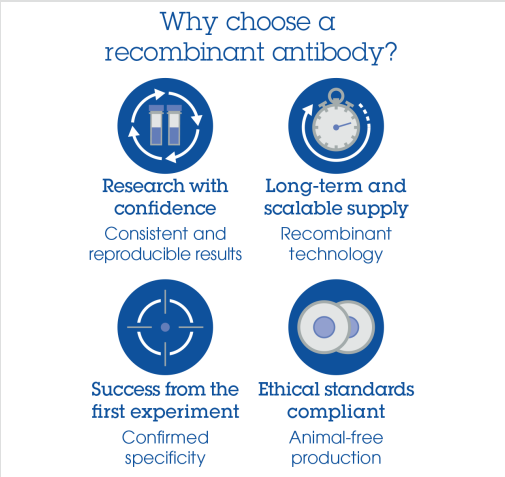
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

OI-RD Scanning - Anti-Cytokeratin 20 antibody [EPR1622Y] - Cytoskeleton Marker (ab76126)

Equilibrium disassociation constant (K_D)

Learn more about K_D

Click here to learn more about K_D



Anti-Cytokeratin 20 antibody [EPR1622Y] - Cytoskeleton Marker (ab76126)

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