


Product datasheet

Anti-Cytokeratin 20 antibody [SP33] ab64090

Recombinant RabMAb

★★★★★ [1 Abreviews](#) [2 References](#) [7 Images](#)

Overview

Product name	Anti-Cytokeratin 20 antibody [SP33]
Description	Rabbit monoclonal [SP33] to Cytokeratin 20
Host species	Rabbit
Tested applications	Suitable for: IHC-P, IHC-Fr, ICC/IF, Flow Cyt
Species reactivity	Reacts with: Rat, Human Predicted to work with: Mouse, Cow, Dog 
Immunogen	Synthetic peptide within Human Cytokeratin 20 aa 400 to the C-terminus (C terminal). The exact sequence is proprietary. Database link: P35900
Positive control	IHC-P: Human colon carcinoma tissue. IHC-Fr: Rat colon Tissue ICC/IF: HT-29 cells Flow Cyt: HT-29 cells
General notes	This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none">- High batch-to-batch consistency and reproducibility- Improved sensitivity and specificity- Long-term security of supply- Animal-free production For more information see here . This product is FOR RESEARCH USE ONLY. For commercial use, please contact partnerships@abcam.com.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.60 Preservative: 0.1% Sodium azide Constituents: PBS, 1% BSA
Purity	Protein A/G purified

Purification notes	Purified from TCS by protein A/G.
Clonality	Monoclonal
Clone number	SP33
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab64090 in the following tested applications.

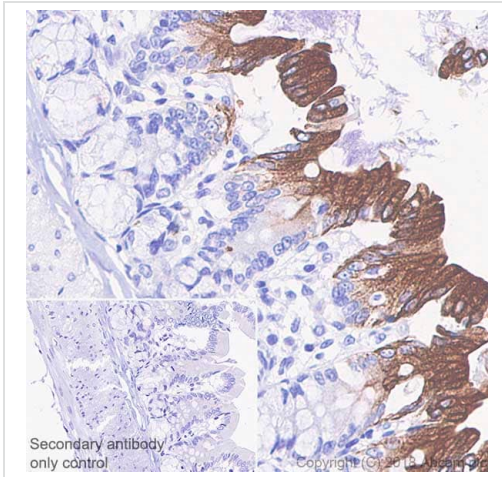
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		1/100. Boil tissue section in citrate buffer pH 6.0 for 10 minutes followed by cooling at room temperature for 20 minutes. Incubate with primary antibody for 30 minutes at room temperature.
IHC-Fr	★★★★★ (1)	1/1000.
ICC/IF		1/500.
Flow Cyt		1/1700.

Target

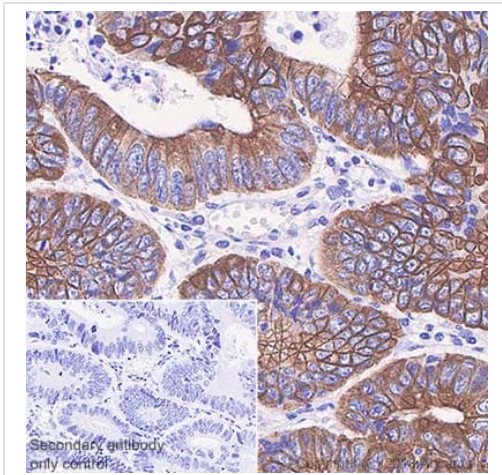
Function	Plays a significant role in maintaining keratin filament organization in intestinal epithelia. When phosphorylated, plays a role in the secretion of mucin in the small intestine.
Tissue specificity	Expressed predominantly in the intestinal epithelium. Expressed in luminal cells of colonic mucosa. 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.
Sequence similarities	Belongs to the intermediate filament family.
Developmental stage	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.
Post-translational modifications	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.
Cellular localization	Cytoplasm.

Images



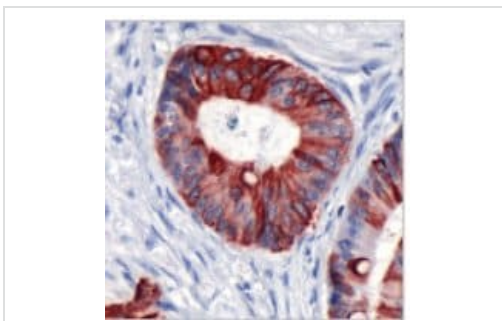
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Rat colon tissue sections labeling Cytokeratin 20 with ab64090 at 1/100 dilution (17.9 µg/ml). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 6.0, epitope retrieval solution 1) for 10mins. Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) was used as the secondary antibody. Hematoxylin was used as a counterstain. Positive staining on rat colon, performed on a Leica Biosystems BOND™ RX instrument. The section was incubated with ab64090 for 30 mins at room temperature.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin 20 antibody [SP33] (ab64090)



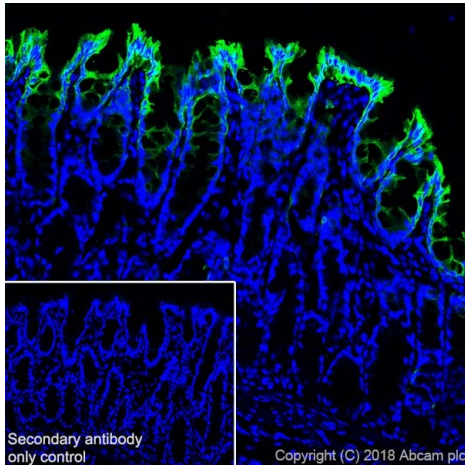
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human colon carcinoma tissue sections labeling Cytokeratin 20 with ab64090 at 1/100 dilution (17.9 µg/ml). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 6.0, epitope retrieval solution 1) for 10mins. Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) was used as the secondary antibody. Hematoxylin was used as a counterstain. Positive staining on human colon carcinoma, performed on a Leica Biosystems BOND™ RX instrument. The section was incubated with ab64090 for 30 mins at room temperature.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin 20 antibody [SP33] (ab64090)



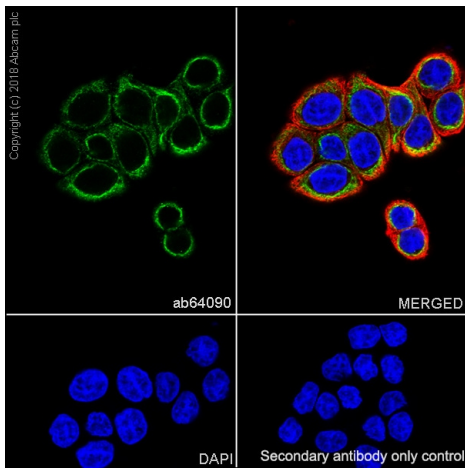
Formalin-fixed, paraffin-embedded human colon carcinoma tissue stained for Cytokeratin 20 with ab64090 at a 1/100 dilution in immunohistochemical analysis.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin 20 antibody [SP33] (ab64090)



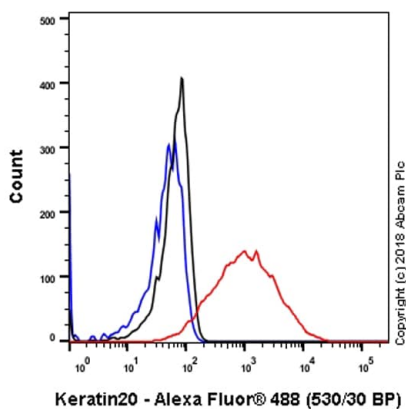
Immunohistochemistry (Frozen sections) - Anti-Cytokeratin 20 antibody [SP33] (ab64090)

Immunohistochemistry (Frozen) analysis of rat colon tissue section labeling Cytokeratin 20 with purified ab64090 at 1/1000 (1.8 µg/ml). Sections were fixed in 4% paraformaldehyde and permeabilized with 0.2% Triton X-100. Antigen retrieval was heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20). Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody at 1/1000 (2 µg/ml) dilution. DAPI was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



Immunocytochemistry/ Immunofluorescence - Anti-Cytokeratin 20 antibody [SP33] (ab64090)

Immunocytochemistry/ Immunofluorescence analysis of HT-29 (human colorectal adenocarcinoma epithelial cell) cells labeling Cytokeratin 20 with purified ab64090 at 1/500 (3.58 µg/ml). Cells were fixed in 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. Cells were counterstained with **ab195889** Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1/200 (2.5 µg/ml). Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody at 1/1000 (2 µg/ml) dilution. DAPI was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



Flow Cytometry - Anti-Cytokeratin 20 antibody [SP33] (ab64090)

Flow cytometry analysis of HT-29 (human colorectal adenocarcinoma) labeling Cytokeratin 20 with purified ab64090 at 1/1700 dilution (1.05 µg/ml) (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) at 1/2000 dilution was used as a secondary antibody. Isotype control -Rabbit monoclonal IgG (**ab172730**) (Black). Unlabeled control -Unlabelled cells (blue).

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-Cytokeratin 20 antibody [SP33] (ab64090)

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