abcam

Product datasheet

Anti-Cytokeratin 20 antibody [KRT20/1993] ab268107

4 Images

Overview

Product name	Anti-Cytokeratin 20 antibody [KRT20/1993]
Description	Mouse monoclonal [KRT20/1993] to Cytokeratin 20
Host species	Mouse
Tested applications	**Suitable for:** WB, IHC-P, Protein Array
Species reactivity	**Reacts with:** Human
Immunogen	Recombinant fragment within Human Cytokeratin 20 aa 196-323. The exact sequence is proprietary. Database link: **P35900**
Positive control	WB: HT29 cell lysate. IHC-P: Human colon and colon carcinoma tissue.
General notes	The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

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 long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.2 Preservative: 0.05% Sodium azide Constituents: PBS, 0.05% BSA
Purity	Protein A/G purified
Purification notes	Purified from bioreactor concentrate.
Clonality	Monoclonal
Clone number	KRT20/1993
Isotype	IgG2b

Light chain type	kappa

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab268107 in the following tested applications.

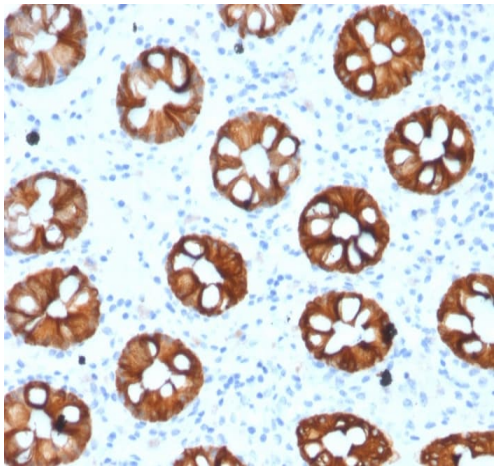
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use a concentration of 1 - 2 µg/ml. Predicted molecular weight: 48 kDa.
IHC-P		Use a concentration of 1 - 2 µg/ml. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
Protein Array		Use at an assay dependent concentration.

Target

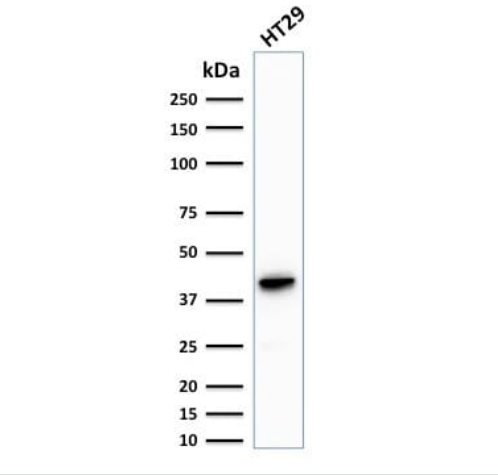
Function	Plays a significant role in maintaining keratin filament organization in intestinal epithelia. When phosphorylated, plays a role in the secretion of mucin in the small intestine.
Tissue specificity	Expressed predominantly in the intestinal epithelium. Expressed in luminal cells of colonic mucosa. 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) - Anti-Cytokeratin 20 antibody [KRT20/1993] (ab268107)

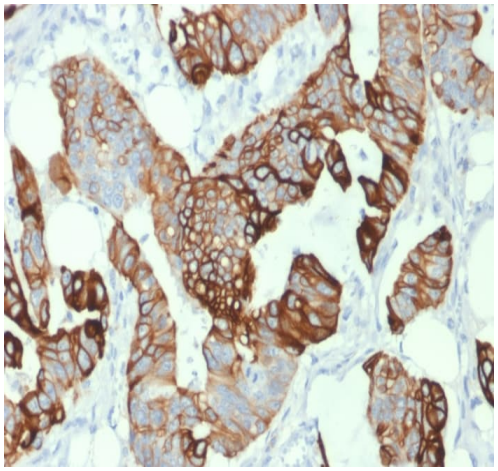
Formalin-fixed, paraffin-embedded human normal colon tissue stained for Cytokeratin 20 using ab268107 at 2 µg/ml in immunohistochemical analysis.



Western blot - Anti-Cytokeratin 20 antibody [KRT20/1993] (ab268107)

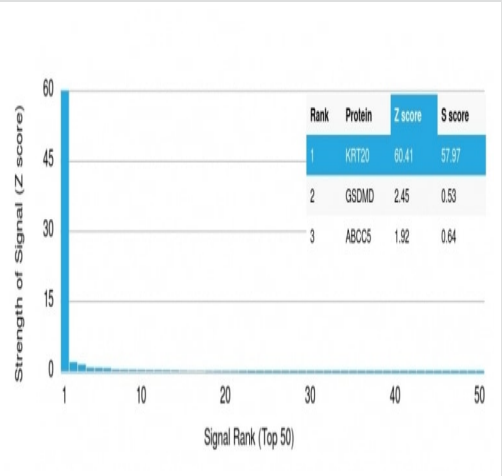
Anti-Cytokeratin 20 antibody [KRT20/1993] (ab268107) at 2 µg/ml + HT29 (Human colorectal adenocarcinoma cell line) cell lysate

Predicted band size: 48 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin 20 antibody [KRT20/1993] (ab268107)

Formalin-fixed, paraffin-embedded human colon carcinoma tissue stained for Cytokeratin 20 using ab268107 at 2 µg/ml in immunohistochemical analysis.



Protein Array - Anti-Cytokeratin 20 antibody [KRT20/1993] (ab268107)

Protein Array containing more than 19,000 full-length human proteins using ab268107.

Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProtTM array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProt^{TM} are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.

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