abcam

ab215838

Anti-pan Cytokeratin antibody [PAN-CK (Cocktail)]

Lab Essentials

Key facts

Isotype	IgG
Host species	Mouse
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.05% Sodium azide Constituents: PBS, 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	Native Full Length Protein corresponding to Human KRT76. Database link Q01546
Clone number	PAN-CK (Cocktail)
Purification technique	Affinity purification Protein A/G
Specificity	This antibody cocktail recognizes acidic (Type I or LMW) and basic (Type II or HMW) Cytokeratins, with 67kDa (Cytokeratin1); 64kDa (Cytokeratin3); 59kDa (Cytokeratin4); 58kDa (Cytokeratin5); 56kDa (Cytokeratin6); 55kDa (Cytokeratin7); 52kDa (Cytokeratin8); 56.5kDa (Cytokeratin10); 53kDa (Cytokeratin13); 50kDa (Cytokeratin14); 50kDa (Cytokeratin15); 48kDa (Cytokeratin16); 46kDa (Cytokeratin17); 45kDa (Cytokeratin18) and 40kDa (Cytokeratin19).
Concentration	0.2 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →
Purification notes	ab215838 is purified from Bioreactor Concentrate by Protein A/G.

Reactivity data

ICC

Tested

Species	Human
Dilution info	1-2 μg/mL
Notes	-

Predicted

Species	Mouse, Rat, Rabbit, Chicken, Cow, Dog, Monkey
Dilution info	-
Notes	-

Flow Cyt

Tested

Species	Human
Dilution info	0.5-2 μg for 10^6 Cells
Notes	-

Predicted

Species	Mouse, Rat, Rabbit, Chicken, Cow, Dog, Monkey
Dilution info	-
Notes	-

IHC-P

Tested

Species	Human
Dilution info	1-2 μg/mL
Notes	-

Predicted

Species	Mouse, Rat, Rabbit, Chicken, Cow, Dog, Monkey
Dilution info	-
Notes	-

Target data

See full target information KRT76

Function	Probably contributes to terminal cornification.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

Isotype is mouse IgGs, kappa.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	Pan cytokeratin also known as cytokeratin AE1/AE3 is a cytoskeletal protein complex that consists of different keratin polypeptides. It mechanically supports epithelial cells contributing to their structural integrity. The protein mass is variable due to its composite nature ranging between 40 to 67 kDa. Pan cytokeratin is expressed in epithelial tissues throughout the body serving as a reliable marker for identifying epithelial origin cells in histological studies.

Biological function summary	Keratins in pan cytokeratin contribute to maintaining structural stability within epithelial cells. They act as components of the cytoskeletal network interacting with other cellular structures to provide protection from stress and mechanical damage. Pan cytokeratin exists as part of the intermediate filament protein complex which plays a significant role in cellular mechanics and cohesion essential for tissue integrity.
Pathways	Intermediate filaments containing pan cytokeratin participate in pathways related to cell differentiation and stress response. Its interactions with other proteins like desmoplakin and plectin link the cytoskeletal filaments to cell membranes and the extracellular matrix. This involvement is important in pathways related to cellular structural integrity and epithelial-mesenchymal transition (EMT).
Associated diseases and disorders	Pan cytokeratin serves as a critical marker in the diagnosis of epithelial-derived cancers such as carcinoma and conditions like psoriasis. Abnormal expression patterns of pan cytokeratin indicate tumor presence and origin. Its connection to proteins such as E-cadherin and vimentin assists in understanding the progression and metastasis of cancer by facilitating EMT and tissue invasion diagnostics.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

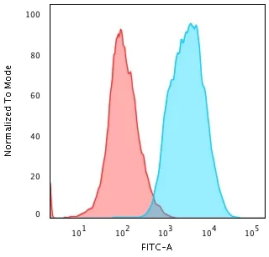
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

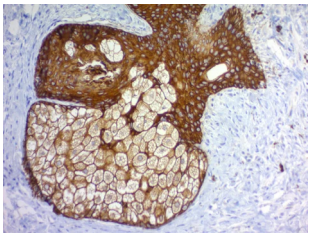
4 product images



Flow Cytometry - Anti-pan Cytokeratin antibody [PAN-CK (Cocktail)] (ab215838)

Pan Cytokeratin Flow Cytometry staining using mouse Anti-pan Cytokeratin antibody

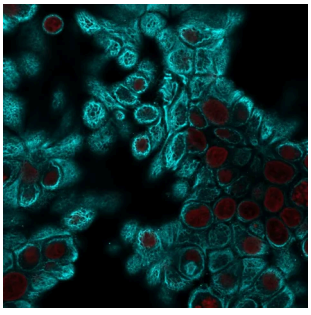
Flow cytometry analysis of HeLa (human epithelial cell line from cervix adenocarcinoma) cells labeling pan-Cytokeratin with ab215838 at 2µg/10^6 cells followed by Goat Anti-Mouse IgG-CF488 (blue); isotype control (red).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-pan Cytokeratin antibody [PAN-CK (Cocktail)] (ab215838)

Pan Cytokeratin Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using mouse Anti-pan Cytokeratin antibody

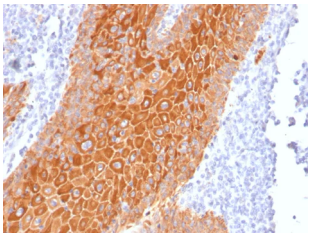
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human basal cell carcinoma tissue labelling pan Cytokeratin with ab215838 at 2 µg/mL for 30 minutes at room temperature. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at room temperature for 20 minutes.



Immunocytochemistry - Anti-pan Cytokeratin antibody [PAN-CK (Cocktail)] (ab215838)

Pan Cytokeratin Immunocytochemistry staining using mouse Anti-pan Cytokeratin antibody

Immunofluorescence analysis of HeLa (human epithelial cell line from cervix adenocarcinoma) cells labeling pan Cytokeratin with ab215838 at 2 µg/mL followed by Goat anti-Mouse IgG-CF488 (cyan). The nuclear counterstain is NucSpot (red).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-pan Cytokeratin antibody [PAN-CK (Cocktail)] (ab215838)

Pan Cytokeratin Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using mouse Anti-pan Cytokeratin antibody

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human squamous cell carcinoma tissue labelling pan Cytokeratin with ab215838 at 2 µg/mL for 30 minutes at room temperature. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at room temperature for 20 minutes.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.