abcam

ab75869

Anti-Cytokeratin 5 antibody [EPR1600Y]

Recombinant | RabMAb | 20ul selling size

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR1600Y
Purification technique	Affinity purification Protein A
Dissociation constant	3.19×10^{-10} M
Concentration	0.053 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Human
Dilution info	1/100 - 1/1000
Notes	

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

IP

Not recommended

Species	Human
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	1/10000 - 1/50000
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/100 - 1/500
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	-

Target data

See full target information KRT5

Function	Required for the formation of keratin intermediate filaments in the basal epidermis and maintenance of the skin barrier in response to mechanical stress (By similarity). Regulates the recruitment of Langerhans cells to the epidermis, potentially by modulation of the abundance of macrophage chemotactic cytokines, macrophage inflammatory cytokines and CTNND1 localization in keratinocytes (By similarity).

Storage

Shipped at conditions	Conditional Ambient
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	Stable for 12 months at -20°C

Notes

Species reactivity
Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?
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 batch production

For more information, read more on recombinant antibodies.

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.

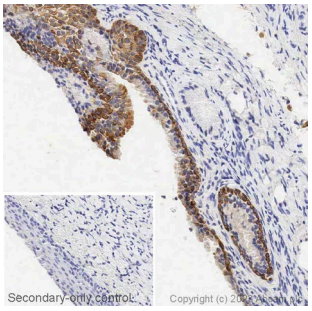
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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.

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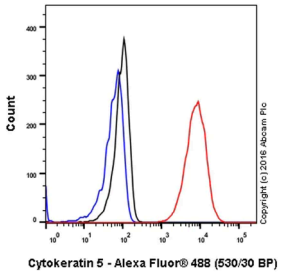
10 product images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin 5 antibody [EPR1600Y] (ab75869)

IHC image of Cytokeratin 5 staining in a section of formalin-fixed paraffin-embedded normal human cervix* performed on a Leica Biosystems BOND® RX instrument. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20mins. The section was then incubated with ab78569, 0.1ug/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX. The inset secondary-only control image is taken from an identical assay without primary antibody. For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times. *Tissue obtained from the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre

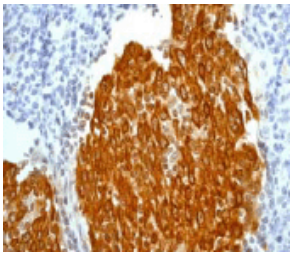
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Flow Cytometry (Intracellular) - Anti-Cytokeratin 5 antibody [EPR1600Y] (ab75869)

Cytokeratin 5 Flow Cytometry (Intracellular) staining using rabbit Anti-Cytokeratin 5 antibody

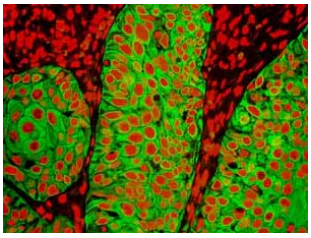
Intracellular Flow Cytometry analysis of A431 (human epidermoid carcinoma) cells labeling Cytokeratin 5 with purified ab75869 at 1/20 dilution (10ug/ml) (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. A Goat anti rabbit IgG (Alexa Fluor® 488) (1/2000 dilution) was used as the secondary antibody. Rabbit monoclonal IgG (Black) was used as the isotype control, cells without incubation with primary antibody and secondary antibody (Blue) was used as the unlabeled control.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin 5 antibody [EPR1600Y] (ab75869)

Cytokeratin 5 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Cytokeratin 5 antibody

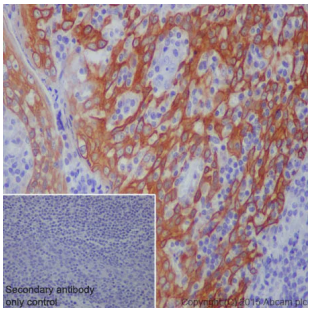
Unpurified ab75869 at 1/100 dilution staining Cytokeratin 5 in human squamous cervical carcinoma by Immunohistochemistry, Paraffin-embedded tissue.
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin 5 antibody [EPR1600Y] (ab75869)

Cytokeratin 5 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Cytokeratin 5 antibody

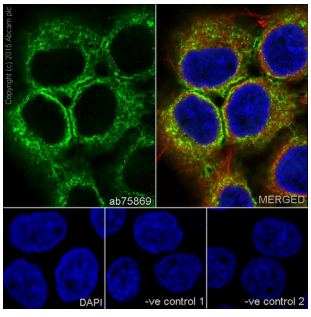
Fluorescent immunohistochemical analysis of paraffin-embedded human cervical carcinoma tissue using unpurified ab75869. Green-CK5 red-PI.
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin 5 antibody [EPR1600Y] (ab75869)

Cytokeratin 5 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Cytokeratin 5 antibody

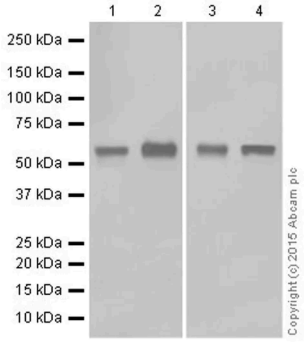
Immunohistochemical analysis of paraffin embedded human tonsil tissue section labelling Cytokeratin 5 with purified ab75869 at dilution of 1/1000. The secondary antibody used was HRP-conjugated Goat Anti-Rabbit IgG H&L (ab97051) at dilution of 1/500. The sample was counter-stained with hematoxylin. Antigen retrieval was perfomed using Tris-EDTA buffer, pH 9.0. PBS was used instead of the primary antibody as the negative control and is shown in the inset.



Immunocytochemistry/ Immunofluorescence - Anti-Cytokeratin 5 antibody [EPR1600Y] (ab75869)

Cytokeratin 5 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-Cytokeratin 5 antibody

Immunocytochemistry/Immunofluorescence analysis of A431 (human epidermoid carcinoma) cells labelling Cytokeratin 5 with purified ab75869 at 1/100. Cells were fixed with 4% Paraformaldehyde and permeabilized with 0.1% Triton X-100. ab150077, Alexa Fluor® 488-conjugated goat anti-rabbit IgG (1/1000) was used as the secondary antibody. The cells were co-stained with ab7291, a mouse anti-tubulin antibody (1/1000) using ab150120, an Alexa Fluor® 594-conjugated goat anti-mouse IgG (1/1000) as the secondary. Nuclei couterstained with DAPI (blue). For negative control 1, rabbit primary antibody was used, followed by anti-mouse secondary antibody (ab150120). For negative control 2, mouse primary antibody (ab7291) was used followed by anti-rabbit secondary antibody (ab150077).



Western blot - Anti-Cytokeratin 5 antibody [EPR1600Y] (ab75869)

Cytokeratin 5 Western blot staining using rabbit Anti-Cytokeratin 5 antibody

Blocking and diluting buffer 5% NFDM/TBST
All lanes:
Western blot - Anti-Cytokeratin 5 antibody [EPR1600Y] (ab75869) at 1/50000 dilution

Lane 1:
A431 (human epidermoid carcinoma) whole cell lysate at 20 µg

Lane 2:
HACAT (human keratinocyte) whole cell lysate at 20 µg

Lane 3:
Human skin tissue lysate at 20 µg

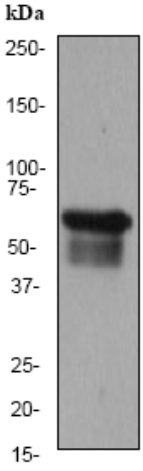
Lane 4:
Human fetal tonsil tissue lysate at 20 µg

Secondary

All lanes:
Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/1000 dilution

Predicted band size: 62 kDa

Observed band size: 62 kDa



Western blot - Anti-Cytokeratin 5 antibody [EPR1600Y] (ab75869)

Cytokeratin 5 Western blot staining of A431 cell lysate using rabbit Anti-Cytokeratin 5 antibody

All lanes:
Western blot - Anti-Cytokeratin 5 antibody [EPR1600Y] (ab75869) at 1/10000 dilution

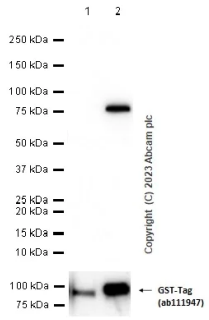
All lanes:
A431 cell lysate at 10 µg

Secondary

All lanes:
goat anti-rabbit HRP at 1/2000 dilution

Predicted band size: 62 kDa

Observed band size: 62 kDa



Western blot - Anti-Cytokeratin 5 antibody [EPR1600Y] (ab75869)

Blocking buffer: 5% NFDM/TBST.
All lanes:
Western blot - Anti-Cytokeratin 5 antibody [EPR1600Y] (ab75869) at 1/1000 dilution

Lane 1:
N-GST tagged full-length recombinant human Cytokeratin 6A Protein at 10 ng

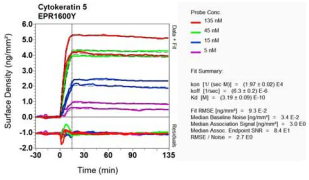
Lane 2:
N-GST tagged full-length recombinant human Cytokeratin 5 protein at 10 ng

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Observed band size: 87 kDa

Exposure time: 10s



OI-RD Scanning - Anti-Cytokeratin 5 antibody [EPR1600Y] (ab75869)

We have systematically measured KD (the equilibrium dissociation constant between the antibody and its antigen), of more than 840 recombinant antibodies to assess not only their individual KD values but also to see the average affinity of antibody. Based on the comparison with published literature values for mouse monoclonal antibodies, Recombinant antibodies appear to be on average 1-2 order of magnitude higher affinity.

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