abcam

ab239986

Anti-Cytokeratin 17 antibody [EP1623] - BSA and Azide free

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	EP1623
Purification technique	Affinity purification Protein A
Concentration	1.028 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Human
Dilution info	-

Notes	Perform antigen retrieval

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

IP

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

WB

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	-
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	ab199376 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

Target data

See full target information KRT17

Function Type I keratin involved in the formation and maintenance of various skin appendages, specifically in determining shape and orientation of hair (By similarity). Required for the correct growth of hair follicles, in particular for the persistence of the anagen (growth) state (By similarity). Modulates the function of TNF in the specific context of hair cycling. Regulates protein synthesis and epithelial cell growth through binding to the adapter protein SFN and by stimulating Akt/mTOR pathway (By similarity). Involved in tissue repair. May be a marker of basal cell differentiation in complex epithelia and therefore indicative of a certain type of epithelial 'stem cells'. Acts as a promoter of epithelial proliferation by acting a regulator of immune response in skin: promotes Th1/Th17-dominated immune environment contributing to the development of basaloid skin tumors (By similarity). May act as an autoantigen in the immunopathogenesis of psoriasis, with certain peptide regions being a major target for autoreactive T-cells and hence causing their proliferation.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Do Not Freeze

Notes

ab239986 is the carrier-free version of ab109725.

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.

Conjugation ready

Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with 1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

Compatibility

This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc.

Supplementary info

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

Activity summary	Cytokeratin 17 often called K17 or keratin 17 is a type I intermediate filament protein with a molecular weight of approximately 46 kDa. It forms part of the cytoskeleton in epithelial cells and is notably present in the basal cells of epithelial tissues including the skin hair follicles and the lining of internal organs. Due to its specific expression pattern K17 serves as a useful biomarker in various research and clinical settings.

Biological function summary	The roles of K17 extend beyond mere structural support. This protein contributes to cellular processes such as proliferation tissue repair and the regulation of immune responses. K17 often forms a complex with its partner keratin 6 enabling structural stability and resilience in epithelial cells. Its presence influences the behavior of the cells in skin and other epithelial-lined organs.
Pathways	K17 participates in key pathways related to skin biology and inflammation notably the Wnt/β-catenin and NF-κB signaling pathways. These pathways connect K17 to cellular processes like growth differentiation and inflammation. In particular keratin 6 is another important protein in these cascades closely interacting with K17 in maintenance and repair processes within epithelial tissues.
Associated diseases and disorders	K17 has been implicated in psoriasis and certain types of cancer such as cervical and breast cancer. In psoriasis an inflammatory skin condition K17 interacts with pro-inflammatory cytokines contributing to the hyperproliferative state of the skin. Its overexpression serves as a marker in diagnosing and understanding the severity of these disorders highlighting its relationship with keratin 6 which is similarly upregulated in psoriatic lesions and certain tumors. These associations make K17 a significant focus for therapeutic targeting and diagnostic applications.

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

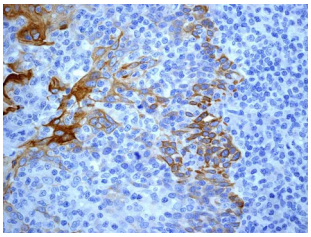
We do not recommend this combination. It is not covered by our product promise.

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.

5 product images

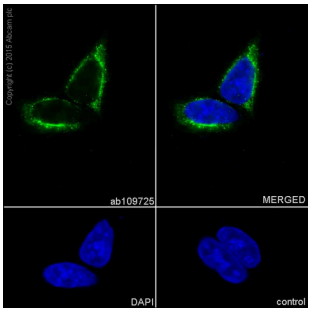


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin 17 antibody [EP1623] - BSA and Azide free (ab239986)

Cytokeratin 17 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Cytokeratin 17 antibody

Immunohistochemical analysis of paraffin-embedded Human tonsil tissue using ab109725 at 1/100 dilution
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab109725).

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

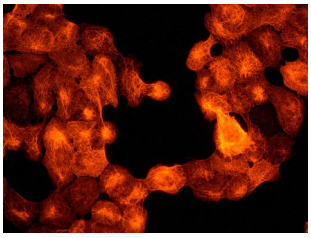


Immunocytochemistry/ Immunofluorescence - Anti-Cytokeratin 17 antibody [EP1623] - BSA and Azide free (ab239986)

Cytokeratin 17 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-Cytokeratin 17 antibody

Immunocytochemistry/Immunofluorescence analysis of HeLa (human cervix adenocarcinoma) cells labelling Cytokeratin 17 with purified ab109725 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.

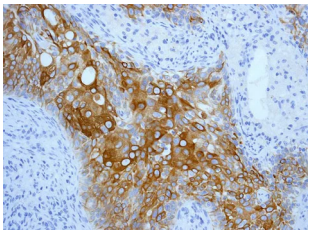
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab109725).



Immunocytochemistry/ Immunofluorescence - Anti-Cytokeratin 17 antibody [EP1623] - BSA and Azide free (ab239986)

Cytokeratin 17 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-Cytokeratin 17 antibody

Immunofluorescent staining of A431 cells using ab109725 at 1/100 dilutionThis data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab109725).

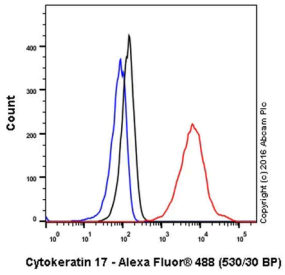


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytokeratin 17 antibody [EP1623] - BSA and Azide free (ab239986)

Cytokeratin 17 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Cytokeratin 17 antibody

Immunohistochemical analysis of paraffin-embedded human squamous cervical carcinoma tissue using ab109725 at 1/100 dilution
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab109725).

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Flow Cytometry (Intracellular) - Anti-Cytokeratin 17 antibody [EP1623] - BSA and Azide free (ab239986)

Cytokeratin 17 Flow Cytometry (Intracellular) staining using rabbit Anti-Cytokeratin 17 antibody

Intracellular Flow Cytometry analysis of A431 (human epidermoid carcinoma) cells labeling Cytokeratin 17 with purified ab109725 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) 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.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab109725).

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