# abcam

# Product datasheet

# Anti-Cytokeratin 17 antibody [EP1623] - Cytoskeleton Marker ab109725

Recombinant RabMAb

25 References 7 Images

Overview

Product name Anti-Cytokeratin 17 antibody [EP1623] - Cytoskeleton Marker

**Description** Rabbit monoclonal [EP1623] to Cytokeratin 17 - Cytoskeleton Marker

Host species Rabbit

Tested applications Suitable for: Flow Cyt (Intra), WB, IHC-P, ICC/IF

Unsuitable for: IP

Species reactivity Reacts with: Human

Predicted to work with: Mouse, Rat

**Immunogen** Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

Positive control A431 and HACAT cell lysates Human squamous cervical carcinoma tissue Human tonsil tissue

A431 cells HeLa (human cervix adenocarcinoma) cell lysate

**General notes**This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

Improved sensitivity and specificityLong-term security of supply

- Animal-free production

For more information see here.

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

**Properties** 

Form Liquid

**Storage instructions** Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

Storage buffer pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 50% Glycerol (glycerin, glycerine), 49% PBS, 0.05% BSA

Purity Protein A purified

**Clonality** Monoclonal

1

Clone number

EP1623

Isotype

lgG

#### **Applications**

#### The Abpromise guarantee

Our Abpromise guarantee covers the use of ab109725 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
Flow Cyt (Intra)		1/10 - 1/100. <b>ab172730</b> - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody.
WB		1/1000 - 1/10000. Predicted molecular weight: 48 kDa.
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. Perform antigen retrieval
ICC/IF		1/500. For unpurified use at 1/100 - 1/250.

#### **Application notes**

Is unsuitable for IP.

#### **Target**

#### **Function**

May play a role in the formation and maintenance of various skin appendages, specifically in determining shape and orientation of hair. May be a marker of basal cell differentiation in complex epithelia and therefore indicative of a certain type of epithelial "stem cells". 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. Required for the correct growth of hair follicles, in particular for the persistence of the anagen (growth) state. Modulates the function of TNF-alpha 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. Involved in tissue repair.

#### Tissue specificity

Expressed in the outer root sheath and medulla region of hair follicle specifically from eyebrow and beard, digital pulp, nail matrix and nail bed epithelium, mucosal stratified squamous epithelia and in basal cells of oral epithelium, palmoplantar epidermis and sweat and mammary glands. Also expressed in myoepithelium of prostate, basal layer of urinary bladder, cambial cells of sebaceous gland and in exocervix (at protein level).

#### Involvement in disease

Defects in KRT17 are a cause of pachyonychia congenita type 2 (PC2) [MIM:167210]; also known as pachyonychia congenita Jackson-Lawler type. PC2 is an autosomal dominant ectodermal dysplasia characterized by hypertrophic nail dystrophy resulting in onchyogryposis (thickening and increase in curvature of the nail), palmoplantar keratoderma and hyperhidrosis, follicular hyperkeratosis, multiple epidermal cysts, absent/sparse eyebrow and body hair, and by the presence of natal teeth.

Defects in KRT17 are a cause of steatocystoma multiplex (SM) [MIM:184500]. SM is a disease characterized by round or oval cystic tumors widely distributed on the back, anterior trunk, arms, scrotum, and thighs.

Note=KRT16 and KRT17 are coexpressed only in pathological situations such as metaplasias

and carcinomas of the uterine cervix and in psoriasis vulgaris.

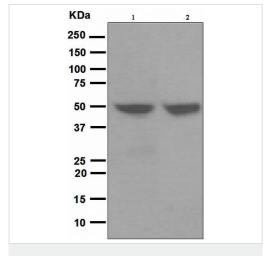
Sequence similarities

Belongs to the intermediate filament family.

**Cellular localization** 

Cytoplasm.

#### **Images**



Western blot - Anti-Cytokeratin 17 antibody [EP1623] - Cytoskeleton Marker (ab109725) **All lanes :** Anti-Cytokeratin 17 antibody [EP1623] - Cytoskeleton Marker (ab109725) at 1/1000 dilution

Lane 1 : A431 cell lysate

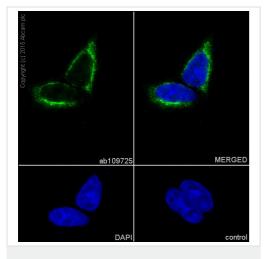
Lane 2 : HACAT cell lysates

Lysates/proteins at 10 µg per lane.

## **Secondary**

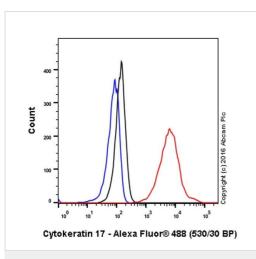
**All lanes :** Standard HRP labelled goat anti-rabbit at 1/2000 dilution

Predicted band size: 48 kDa

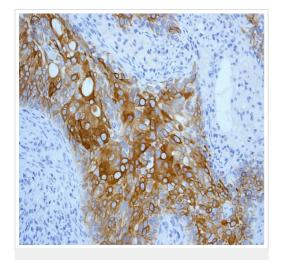


Immunocytochemistry/ Immunofluorescence - Anti-Cytokeratin 17 antibody [EP1623] - Cytoskeleton Marker (ab109725) Immunocytochemistry/Immunofluorescence analysis of HeLa (human cervix adenocarcinoma) cells labelling Cytokeratin 17 with purified ab109725 at 1/500. Cells were fixed with 100% methanol. ab150077, Alexa Fluor<sup>®</sup> 488-conjugated goat anti-rabbit lgG (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.



Flow Cytometry (Intracellular) - Anti-Cytokeratin 17 antibody [EP1623] - Cytoskeleton Marker (ab109725) 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 lgG (Alexa Fluor<sup>®</sup> 488) (1/2000) was used as the secondary antibody. Rabbit monoclonal lgG (Black) was used as the isotype control, cells without incubation with primary antibody and secondary antibody (Blue) was used as the unlabeled control.

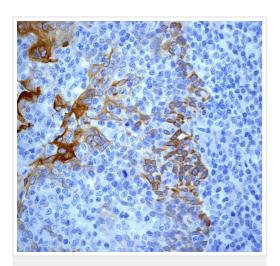


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cytokeratin 17 antibody

[EP1623] - Cytoskeleton Marker (ab109725)

Immunohistochemical analysis of paraffin-embedded human squamous cervical carcinoma tissue using ab109725 at 1/100 dilution

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

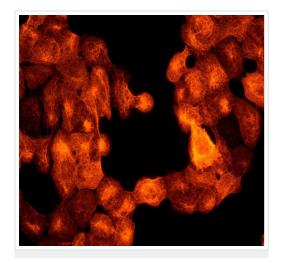


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cytokeratin 17 antibody

[EP1623] - Cytoskeleton Marker (ab109725)

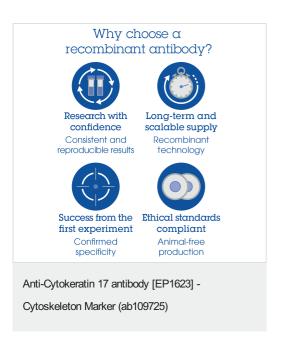
Immunohistochemical analysis of paraffin-embedded Human tonsil tissue using ab109725 at 1/100 dilution

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



Immunocytochemistry/ Immunofluorescence - Anti-Cytokeratin 17 antibody [EP1623] - Cytoskeleton Marker (ab109725)

Immunofluorescent staining of A431 cells using ab109725 at 1/100 dilution



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