

CK17 Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1303a**Specification**

CK17 Antibody - Product Information

| | |
|-------------------|------------------------|
| Application | WB, IHC, FC, IF |
| Primary Accession | Q04695 |
| Reactivity | Human |
| Host | Mouse |
| Clonality | Monoclonal |
| Isotype | IgG2b |
| Calculated MW | 49kDa KDa |

Description

CK17, also known as KRT17, it is the type I intermediate filament chain keratin 17. It is found in nail beds, hair follicles, sebaceous glands, and other epidermal appendages. Mutations in this gene lead to Jackson-Lawler type pachyonychia congenita and steatocystoma multiplex. 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.

Immunogen

Purified recombinant fragment of CK17 expressed in E. Coli.

Formulation

Ascitic fluid containing 0.03% sodium azide.

CK17 Antibody - Additional Information

Gene ID 3872

Other Names

Keratin, type I cytoskeletal 17, 39.1, Cytokeratin-17, CK-17, Keratin-17, K17, KRT17

Dilution

WB~~1/500 - 1/2000
IHC~~1/200 - 1/1000
FC~~1:200~~400
IF~~1:200~1000.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

CK17 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

CK17 Antibody - Protein Information

Name 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-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 (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.

Cellular Location

Cytoplasm {ECO:0000250|UniProtKB:Q9QWL7}.

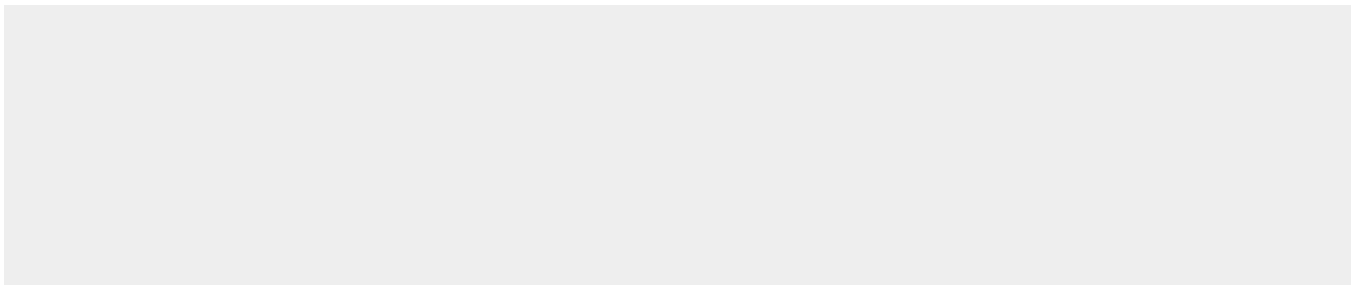
Tissue Location

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)

CK17 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

CK17 Antibody - Images

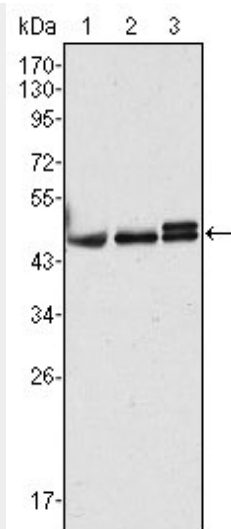


Figure 1: Western blot analysis using CK17 mouse mAb against Hela (1), MCF-7 (2) and A431 (3) cell lysate.

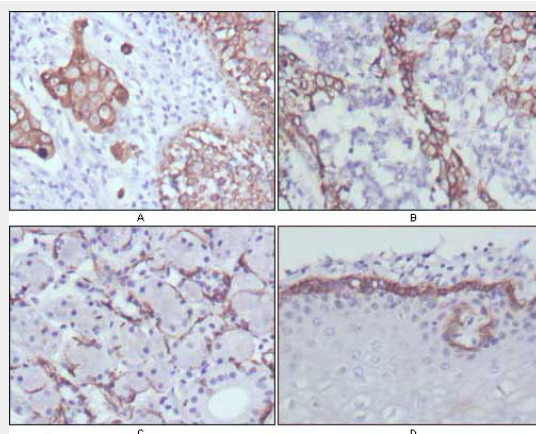


Figure 2: Immunohistochemical analysis of paraffin-embedded human lung cancer (A), endometrial carcinoma (B), sublingual gland (C) and esophagus (D) tissues using CK17 mouse mAb with DAB staining.

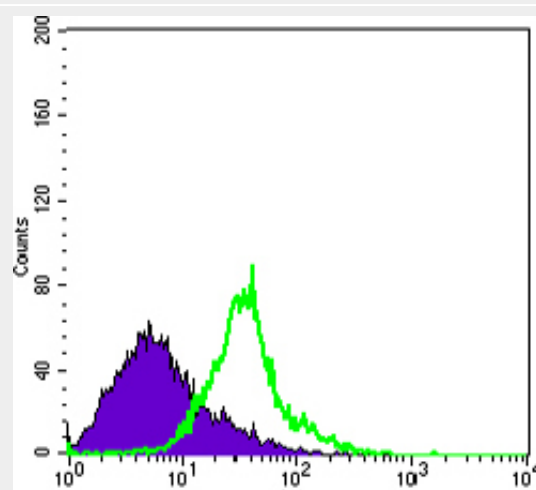


Figure 4: Flow cytometric analysis of Hela cells using WNT1 mouse mAb (green) and negative control (purple).

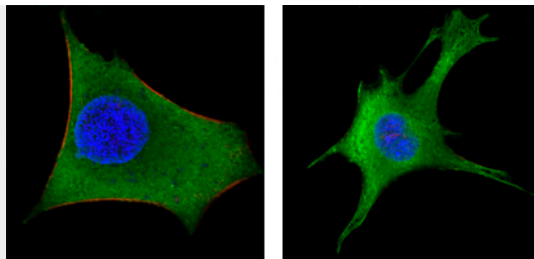


Figure 2: Confocal immunofluorescence analysis of Hela (left) and 3T3-L1 (right) cells using anti-WNT1 mAb (green). Red: Actin filaments have been labeled with DY-554 phalloidin. Blue: DRAQ5 fluorescent DNA dye.

CK17 Antibody - References

1. Am J Pathol. 2002 Dec;161(6):1991-6.
2. Br J Dermatol. 1995 Oct;133(4):501-11.