

Cytokeratin 17 (KRT17) (Basal Epithelial Marker) Antibody - With BSA and Azide
Mouse Monoclonal Antibody [Clone SPM560]
Catalog # AH10566

Specification

**Cytokeratin 17 (KRT17) (Basal Epithelial Marker) Antibody - With BSA and Azide -
Product Information**

Application	WB, IHC, IF, FC
Primary Accession	Q04695
Other Accession	3872 , 2785
Reactivity	Human, Rat, Pig, Goat, Bovine
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG2b, kappa
Calculated MW	46kDa kDa

**Cytokeratin 17 (KRT17) (Basal Epithelial Marker) Antibody - With BSA and Azide -
Additional Information**

Gene ID 3872

Other Names

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

Application Note

WB~~1:1000<br \><span class
="dilution_IHC">IHC~~1:100~500<br \><span class
="dilution_IF">IF~~1:50~200<br \>FC~~1:10~50

Format

200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

Storage

Store at 2 to 8°C. Antibody is stable for 24 months.

Precautions

Cytokeratin 17 (KRT17) (Basal Epithelial Marker) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

**Cytokeratin 17 (KRT17) (Basal Epithelial Marker) Antibody - With BSA and Azide -
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

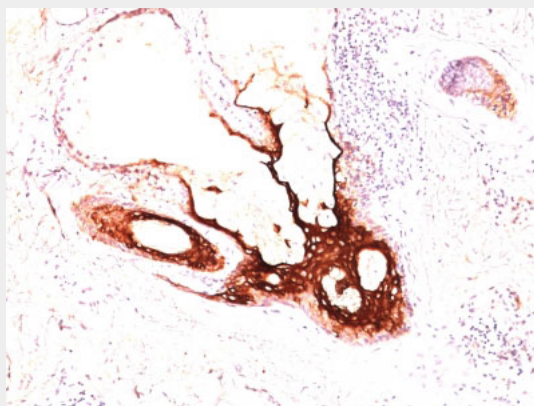
Expressed in the outer root sheath and medulla region of hair follicle specifically from eyebrow and beard, digital pulp, nail matrix and nail bed epithelium, mucosal stratified squamous epithelia and in basal cells of oral epithelium, palmoplantar epidermis and sweat and mammary glands. Also expressed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

Cytokeratin 17 (KRT17) (Basal Epithelial Marker) Antibody - With BSA and Azide - Protocols

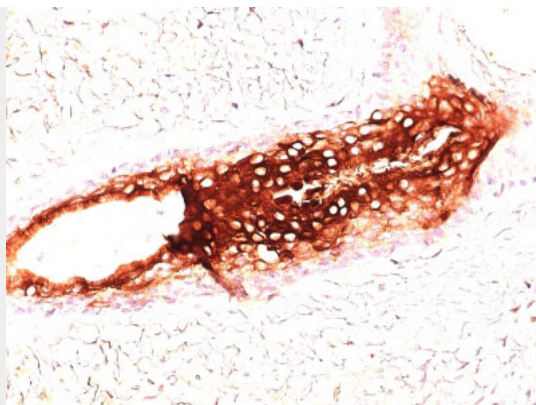
Provided below are standard protocols that you may find useful for product applications.

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

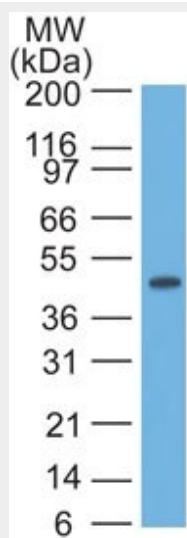
Cytokeratin 17 (KRT17) (Basal Epithelial Marker) Antibody - With BSA and Azide - Images



Formalin-fixed, paraffin-embedded human Skin stained with CK17 Monoclonal Antibody (SPM560).



Formalin-fixed, paraffin-embedded human Skin stained with CK17 Monoclonal Antibody (SPM560).



Western Blot of HeLa Lysate using CK17 Monoclonal Antibody (SPM560).

Cytokeratin 17 (KRT17) (Basal Epithelial Marker) Antibody - With BSA and Azide - Background

Cytokeratin 17 (CK17) is a member of the Cytokeratin subfamily of intermediate filament proteins (IFPs). It is unique in that it is normally expressed in the basal cells of complex epithelia but not in stratified or simple epithelia. CK17 is expressed in the nail bed, hair follicle, sebaceous glands and other epidermal appendages. Antibody to CK17 is an excellent tool to distinguish myoepithelial cells from luminal epithelium of various glands such as mammary, sweat and salivary. CK17 is expressed in epithelial cells of various origins, such as bronchial epithelial cells and skin appendages. It may be considered as an epithelial stem cell marker because CK17 Ab marks basal cell differentiation. CK17 can be useful when included in a panel of antibodies against TTF-1, napsin A, CK5&6, p63, and SOX-2 for diagnostic differentiation between lung adenocarcinoma (LADC) and lung squamous cell carcinoma (SCLC), especially for poorly-differentiated lung carcinoma. CK17 is expressed in SCLC much higher than in LADC. In breast carcinomas, approximately 20% of patients show no expression of ER, PR and Her2, which are defined as triple negative tumor. Eighty-five percent of the triple negative breast carcinomas immunoreact with basal cytokeratins including anti-CK17. Also important is that cases of triple negative breast carcinoma with expression of CK17 show an aggressive clinical course. The histologic differentiation of ampullary cancer, intestinal vs. pancreatobiliary, is very important for treatment. Usually anti-CK17 and anti-MUC1 immunoreactivity represents pancreatobiliary subtype whereas anti-MUC2 and anti-CDX-2 positivity defines intestinal subtype.

**Cytokeratin 17 (KRT17) (Basal Epithelial Marker) Antibody - With BSA and Azide -
References**

(1) Smedts et. al. Am J Pathol 141: 497, 1992. (2) Smedts et. al. Am J Pathol 140: 601, 1992.(3)
Wetzels et. al. Histopathol 20: 295, 1992