10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Cytokeratin 14 (KRT14) (Squamous Cell Marker) Antibody - With BSA and Azide

Mouse Monoclonal Antibody [Clone KRT14/532]
Catalog # AH11690

Product Information

Application	IHC, IF, FC
Primary Accession	P02533
Other Accession	3861, 6545380
Reactivity	Human, Mouse, Rat
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG3
Clone Names	KRT14/532
Calculated MW	51561

Additional Information

Gene ID	3861
Other Names	Keratin, type I cytoskeletal 14, Cytokeratin-14, CK-14, Keratin-14, K14, KRT14
Application Note	IHC~~1:100~500 IF~~1:50~200 FC~~1:10~50
Storage	Store at 2 to 8°C.Antibody is stable for 24 months.
Precautions	Cytokeratin 14 (KRT14) (Squamous Cell Marker) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	KRT14
Function	The nonhelical tail domain is involved in promoting KRT5- KRT14 filaments to self-organize into large bundles and enhances the mechanical properties involved in resilience of keratin intermediate filaments in vitro.
Cellular Location	Cytoplasm. Nucleus. Note=Expressed in both as a filamentous pattern.
Tissue Location	Expressed in the corneal epithelium (at protein level) (PubMed:26758872). Detected in the basal layer, lowered within the more apically located layers specifically in the stratum spinosum, stratum granulosum but is not detected in stratum corneum. Strongly expressed in the outer root sheath of anagen follicles but not in the germinative matrix, inner root sheath or hair (PubMed:9457912). Found in keratinocytes surrounding the club hair during

telogen (PubMed:9457912).

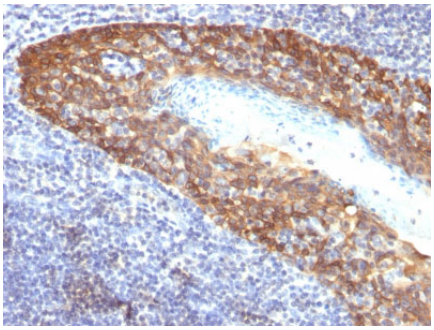
Background

Cytokeratin 14 (CK14) belongs to the type I (or A or acidic) subfamily of low molecular weight keratins and exists in combination with keratin 5 (type II or B or basic). CK14 is found in basal cells of squamous epithelia, some glandular epithelia, myoepithelium, and mesothelial cells. Anti-CK14 is useful in differentiating squamous cell carcinomas from poorly differentiated epithelial tumors. Anti-CK14 is one of the specific basal markers for distinguishing between basal and non-basal subtypes of breast carcinomas. Anti-CK14 is also a good marker for differentiation of intraductal from invasive salivary duct carcinoma by the positive staining of basal cells surrounding the in-situ neoplasm as well as for differentiation of benign prostate from prostate carcinoma. Furthermore, this antibody has been useful in separating oncocytic tumors of the kidney from its renal mimics, and in identifying metaplastic carcinomas of the breast.

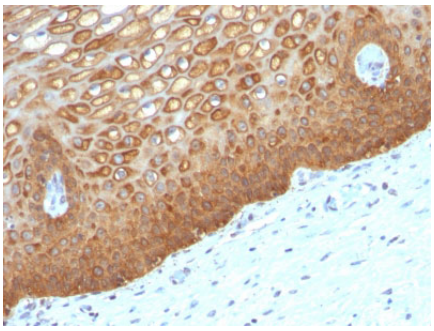
References

van der Velden, L.A., et al. 1993. Cytokeratin expression in normal and (pre)malignant head and neck epithelia: an overview. Head and Neck 15:133-146. | Chen, H., et al. 1995. Keratin 14 gene mutations in patients with epidermolysis bullosa simplex. J. Invest. Dermatol. 105: 629-632

Images



Formalin-fixed, paraffin-embedded human Tonsil stained with Cytokeratin 14 Monoclonal Antibody (KRT14/532).



Formalin-fixed, paraffin-embedded human Cervix stained with Cytokeratin 14 Monoclonal Antibody (KRT14/532).