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

CK14

Mouse Monoclonal antibody(Mab)
Catalog # AD80138

Product Information

Application	IHC-P
Primary Accession	P02533
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	129F6G3
Calculated MW	51561

Additional Information

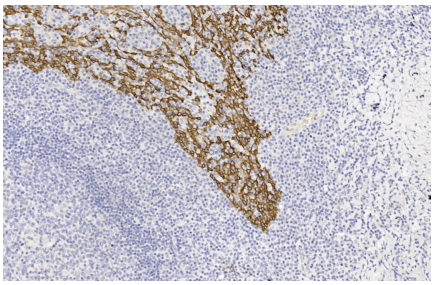
Gene ID	3861
Gene Name	KRT14
Other Names	Keratin, type I cytoskeletal 14, Cytokeratin-14, CK-14, Keratin-14, K14, KRT14
Dilution	IHC-P~~Ready-to-use
Storage	Maintain refrigerated at 2-8°C.
Precautions	CK14 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

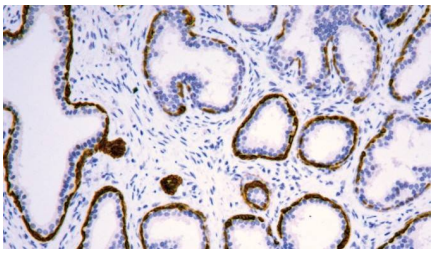
Name	KRT14 (HGNC:6416)
Function	Structural component of intermediate filaments in basal keratinocytes of stratified epithelia. Forms heteropolymers with type II keratin KRT5, contributing to the keratin intermediate filament network that confers mechanical strength and structural integrity to the basal layer of the epidermis and other stratified epithelial (PubMed:11724817, PubMed:1694855, PubMed:1720261, PubMed:41511042). 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 (PubMed:11724817). Displays an antagonist role with KRT15 in basal epithelial cells, where KRT14 promotes cell differentiation while KRT15 maintains the progenitor state and promotes proliferation and clonogenicity (PubMed:41511042). Promotes cell differentiation by retaining YAP1 in the cytoplasm of basal keratinocytes via regulatory residue C367 and stratifin/SNF interaction (PubMed:41511042). Contributes to airway basal cell differentiation after injury (PubMed:36512409).
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). Expressed in gland ducts and in the myoepithelial cells of gland tubules and acini in pulmonary bronchus (PubMed:36512409).

Images



Immunohistochemical analysis of formalin-fixed and paraffin-embedded human tonsil tissue was performed with CK14 primary antibody, followed by peroxidase-conjugated secondary antibody and DAB staining.



Immunohistochemical analysis of formalin-fixed and paraffin-embedded human prostatic adenocarcinoma tissue was performed with CK14 primary antibody, followed by peroxidase-conjugated secondary antibody and DAB staining.

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