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Anti-Cytokeratin 14 KRT14 Rabbit Monoclonal Antibody

Catalog # ABO14185

Product Information

Application	WB, IHC, IF, ICC, IP, FC
Primary Accession	P02533
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Human
Clonality	Monoclonal
Format	Liquid
Description	Anti-Cytokeratin 14 KRT14 Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, IP, Flow Cytometry applications. This antibody reacts with Human.

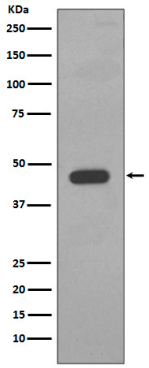
Additional Information

Gene ID	3861
Other Names	Keratin, type I cytoskeletal 14, Cytokeratin-14, CK-14, Keratin-14, K14, KRT14
Calculated MW	51561
Application Details	WB 1:500-1:2000 IHC 1:50-1:200 ICC/IF 1:50-1:200 IP 1:500 FC 1:50
Subcellular Localization	Cytoplasm. Nucleus. Expressed in both as a filamentous pattern.
Tissue Specificity	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. Found in keratinocytes surrounding the club hair during telogen..
Source	Eukaryota
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
Clone Names	Clone: EEO-11
Immunogen	A synthesized peptide derived from human Cytokeratin 14
Purification	Affinity-chromatography
Storage	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Protein Information

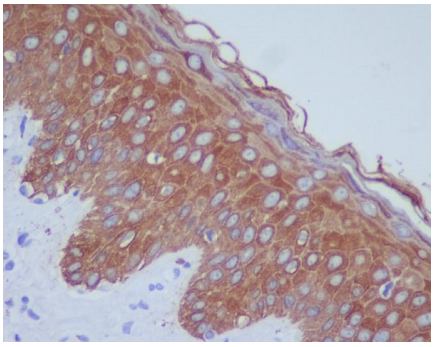
Name	KRT14 (HGNC:6416)
Function	Structural component of intermediate filaments in basal keratinocytes of stratified epithelia. Forms heteropolymers with type II keratin KRT5, contributing to the keratin intermediate filament network that confers mechanical strength and structural integrity to the basal 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



Western blot analysis of Cytokeratin 14 expression in A431 cell lysate.

Immunohistochemical analysis of paraffin-embedded human skin, using Cytokeratin 14 Antibody.



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