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

Anti-Cytokeratin 14 Picoband Antibody

Catalog # ABO10185

Product Information

Application	WB, IHC-P
Primary Accession	P02533
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Keratin, type I cytoskeletal 14(KRT14) detection. Tested with WB, IHC-P in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

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	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 □g/ml, Human, By Heat Western blot, 0.1-0.5 □g/ml, Human, Mouse, Rat
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
Protein Name	Keratin, type I cytoskeletal 14
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human Cytokeratin 14 (446-472aa RQIRTKVMDVHDGKVVSTHEQVLRTKN), identical to the related mouse and rat sequences.
Purification	Immunogen affinity purified.

Cross Reactivity	No cross reactivity with other proteins
Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.

Protein Information

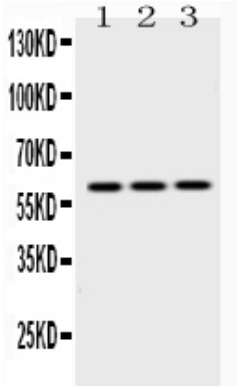
Name	KRT14 (HGNC:6416)
Function	Structural component of intermediate filaments in basal keratinocytes of stratified epithelia. Forms heteropolymers with type II keratin KRT5, contributing to the keratin intermediate filament network that confers mechanical strength and structural integrity to the basal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

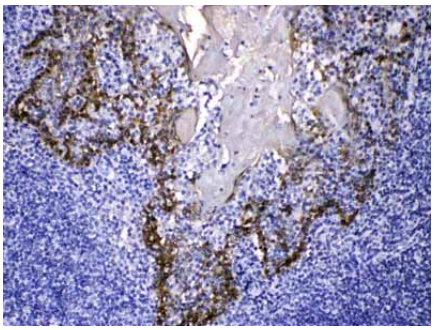
Background

Cytokeratin 14, also known as cytokeratin-14 (CK-14) or keratin-14 (KRT14), is a member of the type I keratin family of intermediate filament proteins. In humans it is encoded by the KRT14 gene. This gene product, a type I keratin, is usually found as a heterotetramer with two keratin 5 molecules, a type II keratin. Mutations in the genes for these keratins are associated with epidermolysis bullosa simplex. At least one pseudogene has been identified at 17p12-p11.

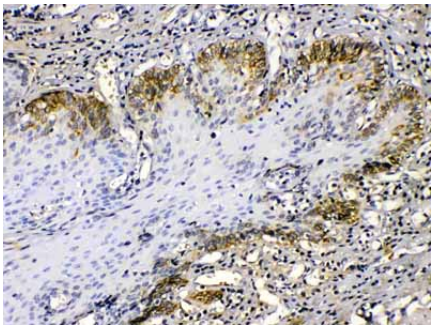
Images

Western blot analysis of Cytokeratin 14 expression in rat brain extract (lane 1), NIH3T3 whole cell lysates (lane 2) and HEPG2 whole cell lysates (lane 3). Cytokeratin 14 at 60KD was detected using rabbit anti- Cytokeratin 14 Antigen Affinity purified polyclonal antibody (Catalog # ABO10185) at 0.5 □¼g/mL. The blot was developed using chemiluminescence (ECL) method .

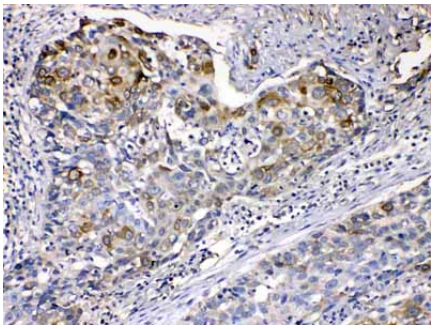




Cytokeratin 14 was detected in paraffin-embedded sections of human tonsil tissues using rabbit anti-Cytokeratin 14 Antigen Affinity purified polyclonal antibody (Catalog # ABO10185) at 1 □¼g/mL. The immunohistochemical section was developed using SABC method .



Cytokeratin 14 was detected in paraffin-embedded sections of human oesophagus squama cancer tissues using rabbit anti- Cytokeratin 14 Antigen Affinity purified polyclonal antibody (Catalog # ABO10185) at 1 □¼g/mL. The immunohistochemical section was developed using SABC method .



Cytokeratin 14 was detected in paraffin-embedded sections of human oesophagus squama cancer tissues using rabbit anti- Cytokeratin 14 Antigen Affinity purified polyclonal antibody (Catalog # ABO10185) at 1 □¼g/mL. The immunohistochemical section was developed using SABC method .

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