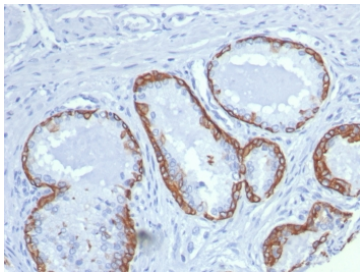
Keratin 14 Antibody / Cytokeratin 14 / KRT14 [clone KRT14/8260R] (V4499)

Catalog No.	Formulation	Size
V4499-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4499-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4499SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	KRT14/8260R
Purity	Protein A/G affinity
UniProt	P02533
Localization	Cytoplasm
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 minutes at RT
Limitations	This Keratin 14 antibody is available for research use only.



IHC staining of FFPE human prostate tissue with Keratin 14 antibody (clone KRT14/8260R). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.

Description

Keratin 14 Antibody recognizes Keratin 14, also known as Cytokeratin 14 (KRT14), a type I intermediate filament protein that is a hallmark of basal cells in stratified squamous epithelia. Keratin 14 is a cytoplasmic structural protein that forms

obligate heterodimers with type II keratins, most prominently Keratin 5, to assemble the intermediate filament network that provides mechanical strength and structural stability to epithelial tissues. Keratin 14 Antibody is widely used as a marker of basal squamous epithelial cells and is frequently referred to in the literature as Cytokeratin 14 antibody or KRT14 antibody.

Cytokeratin 14 expression is characteristically confined to the basal layer of stratified squamous epithelia, including epidermis, oral mucosa, esophagus, cervix, and other squamous-lined tissues. In these tissues, KRT14-positive basal cells represent the proliferative compartment that maintains epithelial renewal and gives rise to suprabasal differentiated cells expressing keratins such as Cytokeratin 13 or Cytokeratin 10. This sharply defined basal localization makes Keratin 14 Antibody particularly useful for distinguishing basal progenitor cells from differentiated squamous epithelial populations.

Dysregulation of Cytokeratin 14 expression has been reported in a variety of pathological settings. Expansion of KRT14 expression beyond the basal layer is commonly observed in epithelial hyperplasia, dysplasia, and squamous cell carcinoma, reflecting altered differentiation programs and abnormal epithelial architecture. Accordingly, Cytokeratin 14 antibody staining patterns are frequently examined in research studies focused on basal cell biology, squamous lineage specification, and epithelial tumor progression.

At the cellular level, Cytokeratin 14 contributes to cytoskeletal organization and participates in anchoring basal epithelial cells to the basement membrane through interactions with desmosomes and hemidesmosomes. Its basal cell-restricted expression makes Keratin 14 Antibody a useful tool for studying epithelial stratification, basal cell dynamics, and squamous tissue organization. The Keratin 14 Antibody (clone KRT14/8260R) is designed to detect Cytokeratin 14 expression in research applications where identification of basal squamous epithelial cells is required.

Application Notes

Optimal dilution of the Keratin 14 antibody should be determined by the researcher.

Immunogen

A recombinant human KRT14 fragment (within amino acids 272-472) was used as the immunogen for the Keratin 14 antibody.

Storage

Aliquot the Keratin 14 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.