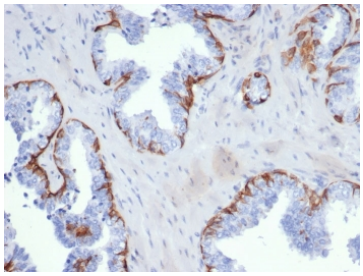
Keratin 5 Antibody / KRT5 / Cytokeratin 5 [clone KRT5/6399R] (V8945)

Catalog No.	Formulation	Size
V8945-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V8945-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V8945SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

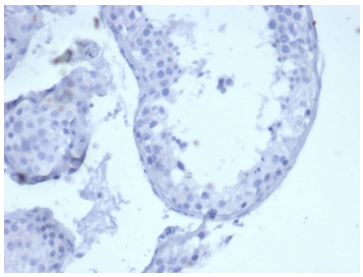
Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	KRT5/6399R
Purity	Protein A/G affinity
UniProt	P13647
Localization	Cytoplasmic
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml
Limitations	This recombinant Keratin 5 antibody is available for research use only.



IHC staining of FFPE human prostate carcinoma tissue with recombinant Keratin 5 antibody (clone KRT5/6399R). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



Negative control: IHC staining of FFPE human brain tissue using recombinant Keratin 5 antibody (clone KRT5/6399R) at 2ug/ml in PBS for 30min RT. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.

Description

Keratin 5 antibody targets Cytokeratin 5, a type II intermediate filament protein encoded by the KRT5 gene and a core structural component of the epithelial cytoskeleton. Keratin 5 is a defining marker of basal epithelial cells, where it forms obligate heterodimers with Keratin 14 to provide mechanical strength and structural stability to stratified and pseudostratified epithelia. Because of its restricted basal-layer expression, a Keratin 5 antibody is widely used to study epithelial organization, basal cell maintenance, and lineage differentiation.

In normal human tissues, Keratin 5 expression is localized to the basal cells of the epidermis, prostate, breast, respiratory tract, and other stratified epithelial surfaces. In glandular organs such as the prostate, Keratin 5 antibody distinctly labels the basal cell layer surrounding benign glands, a feature that is typically absent in invasive adenocarcinoma. This expression pattern makes Keratin 5 a critical marker for evaluating epithelial integrity and basal cell preservation in both research and diagnostic settings.

Keratin 5 also plays an important role in cancer biology, particularly in tumors exhibiting basal or squamous differentiation. In breast cancer, KRT5 expression is strongly associated with basal-like molecular subtypes and triple-negative disease. In lung and head and neck cancers, Keratin 5 antibody is commonly used to support identification of squamous cell carcinoma. Beyond oncology, Keratin 5 has been implicated in inherited skin disorders and epithelial stress responses, highlighting its functional importance in epithelial resilience and repair. A Keratin 5 antibody therefore serves as a reliable tool for investigating basal epithelial identity, tissue architecture, and disease-associated alterations in epithelial differentiation.

Application Notes

Optimal dilution of the recombinant Keratin 5 antibody should be determined by the researcher.

Immunogen

A portion of amino acids 316-590 was used as the immunogen for the recombinant Keratin 5 antibody.

Storage

Aliquot the recombinant Keratin 5 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.