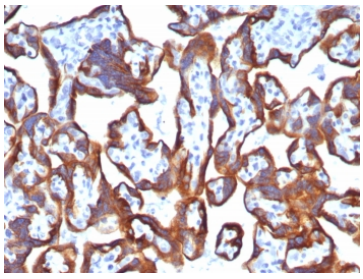
Cytokeratin 7 Antibody / CK7 [clone KRT7/8121R] (V4285)

Catalog No.	Formulation	Size
V4285-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4285-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4285SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

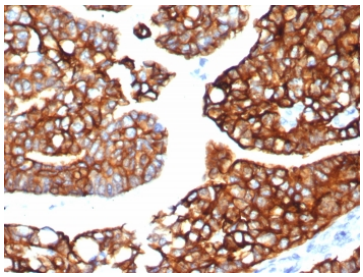
Recombinant RABBIT MONOCLONAL

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	KRT7/8121R
Purity	Protein A/G affinity
UniProt	P08729
Localization	Cytoplasm
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 minutes at RT
Limitations	This Cytokeratin 7 antibody is available for research use only.



IHC staining of FFPE human placental tissue with Cytokeratin 7 antibody (clone KRT7/8121R). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE human lung carcinoma tissue with Cytokeratin 7 antibody (clone KRT7/8121R). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.

Description

Cytokeratin 7 antibody targets Cytokeratin 7, also referred to as CK7, Keratin 7 or KRT7, a type II intermediate filament protein that forms part of the epithelial cytoskeleton. Cytokeratin 7 is predominantly localized in the cytoplasm of simple and glandular epithelial cells, where it contributes to structural integrity, cellular polarity, and resistance to mechanical stress. As a member of the keratin family, Keratin 7 pairs with type I keratins to assemble intermediate filaments that support epithelial architecture in both normal tissues and neoplastic conditions.

Keratin 7 expression is characteristically observed in epithelial linings of the lung, breast, biliary tract, pancreas, endometrium, ovary, and urinary tract, while it is typically absent in normal colorectal epithelium and stratified squamous epithelia. This distinct distribution pattern has made Cytokeratin 7 antibody a widely used reagent for distinguishing epithelial tumor origins, particularly in diagnostic pathology settings where CK7 positivity or negativity provides critical contextual information. Tumors derived from lung adenocarcinoma, breast carcinoma, ovarian carcinoma, cholangiocarcinoma, and urothelial carcinoma frequently demonstrate cytoplasmic Keratin 7 expression, whereas most colorectal adenocarcinomas remain CK7 negative.

Beyond its diagnostic utility, Cytokeratin 7 plays an active biological role in epithelial differentiation and cellular organization. Altered KRT7 expression has been associated with epithelial remodeling, glandular metaplasia, and malignant transformation, reflecting changes in cytoskeletal composition during disease progression. Keratin 7 expression patterns often correlate with epithelial lineage commitment and tumor phenotype, supporting its continued use as a marker of epithelial identity across research applications.

Due to its consistent cytoplasmic localization and lineage-specific expression, Cytokeratin 7 antibody is a valuable tool for detecting epithelial cells and epithelial-derived tumors in research studies. Antibodies recognizing Keratin 7 are commonly applied in histological and biochemical analyses to examine epithelial differentiation, tumor classification, and tissue architecture in both normal and diseased states.

Application Notes

Optimal dilution of the Cytokeratin 7 antibody should be determined by the researcher.

Immunogen

A recombinant partial protein sequence (within amino acids 1-200) from the human protein was used as the immunogen for the Cytokeratin 7 antibody.

Storage

Aliquot the Cytokeratin 7 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.