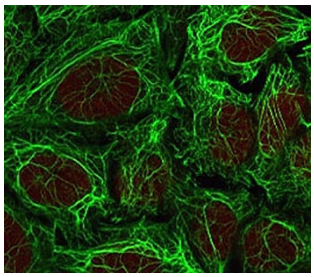
Cytokeratin 7 Antibody / Keratin 7 [clone CTKN7-1] (V7104)

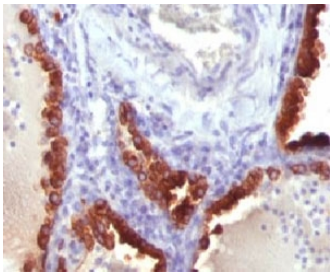
Catalog No.	Formulation	Size
V7104-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7104-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7104SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V7104IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

Bulk quote request

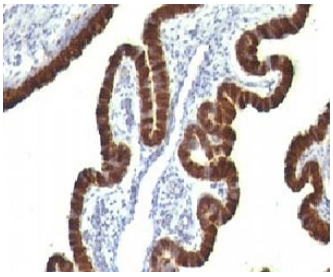
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	CTKN7-1
Purity	Protein G affinity chromatography
UniProt	P08729
Localization	Cytoplasmic
Applications	Western Blot : 1-2ug/ml Immunofluorescence : 1-2ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT Prediluted IHC Only Format : incubate for 30 min at RT (1)
Limitations	This Cytokeratin 7 antibody is available for research use only.



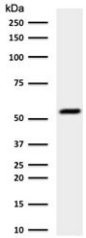
Immunofluorescent staining of methanol-fixed human HeLa cells with Cytokeratin 7 antibody (clone CTKN7-1, green) and Reddot nuclear stain (red).



IHC testing of FFPE human lung carcinoma and Cytokeratin 7 antibody (clone CTKN7-1). Staining of formalin-fixed tissues requires boiling tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min followed by cooling at RT for 20 minutes.



IHC testing of human ovarian carcinoma and Cytokeratin 7 antibody (clone CTKN7-1). Staining of formalin-fixed tissues requires boiling tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min followed by cooling at RT for 20 minutes.



Western blot testing of human HeLa cell lysate with Cytokeratin 7 antibody (clone CTKN7-1). Predicted molecular weight ~51 kDa.

Description

Cytokeratin 7 antibody targets Cytokeratin 7, also known as Keratin 7, a type II intermediate filament protein that is a core structural component of simple and glandular epithelial cells. Cytokeratin 7 is a cytoplasmic protein that contributes to epithelial integrity by forming heteropolymeric filaments with type I keratins, supporting cellular architecture, polarity, and mechanical stability. Because of its selective expression pattern, Cytokeratin 7 antibody is widely used in epithelial biology and cancer research to characterize epithelial lineage and differentiation status.

Cytokeratin 7 expression is prominent in a broad range of glandular and ductal epithelia, including those of the lung, breast, biliary tract, pancreas, endometrium, ovary, and urinary tract. In contrast, normal colorectal epithelium and most stratified squamous epithelia lack Cytokeratin 7 expression. This well-defined distribution has established CK7 as a key epithelial marker for distinguishing tissue origin and cellular phenotype in complex samples. As a result, Cytokeratin 7 antibody detection is frequently applied in studies examining epithelial organization and lineage specification.

In epithelial-derived cancers, Cytokeratin 7 expression reflects underlying differentiation programs and tumor phenotype. CK7-positive staining is commonly observed in carcinomas of the lung, breast, ovary, endometrium, biliary system, and urothelium, while many gastrointestinal adenocarcinomas remain CK7 negative. These expression patterns provide valuable biological context when evaluating epithelial tumors and studying mechanisms of epithelial transformation and

tumor heterogeneity.

Beyond its diagnostic relevance, Cytokeratin 7 participates in dynamic cytoskeletal remodeling during epithelial development, regeneration, and disease-associated stress responses. Changes in Keratin 7 expression often accompany epithelial plasticity, glandular metaplasia, and malignant progression. Antibodies recognizing Cytokeratin 7 therefore serve as reliable tools for investigating epithelial differentiation, tissue architecture, and disease-related alterations in cytoskeletal composition across diverse research applications.

Application Notes

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

1. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

Recombinant full-length human KRT7 protein was used as the immunogen for the Cytokeratin 7 antibody.

Storage

Store the Cytokeratin 7 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).