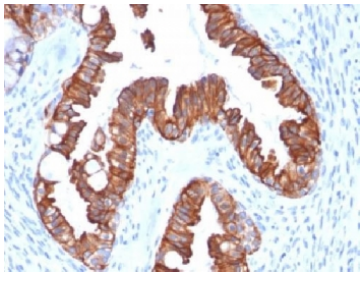
Recombinant Cytokeratin 7 Antibody [clone rOV-TL12/30] (V3706)

Catalog No.	Formulation	Size
V3706-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3706-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3706SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V3706IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

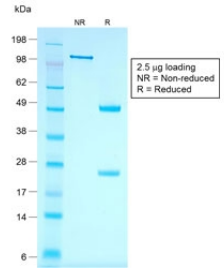
Recombinant MOUSE MONOCLONAL

Bulk quote request

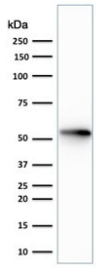
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Recombinant Mouse Monoclonal
Isotype	Mouse IgG1, kappa
Clone Name	rOV-TL12/30
Purity	Protein G affinity chromatography
UniProt	P08729
Localization	Cytoplasmic
Applications	Western Blot : 1-2ug/ml Flow Cytometry : 1-2ug/million cells Immunohistochemistry (FFPE) : 0.5-1ug/ml for 30 min at RT
Limitations	This recombinant Cytokeratin 7 antibody is available for research use only.



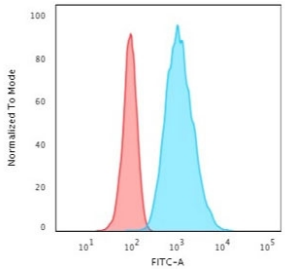
IHC testing of FFPE human endometrial carcinoma with recombinant Cytokeratin 7 antibody (clone rOV-TL12/30). Required HIER: boil tissue sections in 10mM citrate buffer, pH 6, for 10-20 min followed by cooling at RT for 20 min.



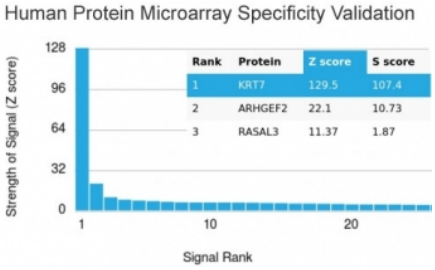
SDS-PAGE analysis of purified, BSA-free recombinant Cytokeratin 7 antibody (clone rOV-TL12/30) as confirmation of integrity and purity.



Western blot testing of human HeLa cell lysate with recombinant Cytokeratin 7 antibody (clone rOV-TL12/30).



Flow cytometry testing of PFA-fixed human HeLa cells with recombinant Cytokeratin 7 antibody (clone rOV-TL12/30); Red=isotype control, Blue= recombinant Cytokeratin 7 antibody.



Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using recombinant Cytokeratin 7 antibody (clone rOV-TL12/30). These results demonstrate the foremost specificity of the rOV-TL12/30 mAb. Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt(TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt(TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.

Description

Recombinant Cytokeratin 7 antibody detects cytokeratin 7, a type II intermediate filament protein encoded by the KRT7 gene. Cytokeratin 7 is expressed in simple epithelia, including those of the lung, breast, ovary, and urinary tract. Because of its tissue distribution, cytokeratin 7 is a widely used marker in cancer pathology, where it helps identify the origin of tumors. Its expression pattern complements that of cytokeratin 20, making the CK7/CK20 profile a key diagnostic tool.

Cytokeratin 7 provides mechanical stability to epithelial cells and contributes to cellular polarity and signaling. It interacts with other cytokeratins to form intermediate filament networks that protect cells from mechanical and chemical stress. Beyond structural roles, cytokeratin 7 participates in intracellular signaling pathways that influence cell growth and differentiation. Dysregulated expression has been observed in carcinomas, where it aids in tumor classification.

The Recombinant Cytokeratin 7 antibody clone rOV-TL12/30 ensures reliable and reproducible detection of CK7. Recombinant manufacturing provides consistent performance across batches, making it dependable for diagnostic and research use. Clone rOV-TL12/30 has been applied in oncology to evaluate carcinomas of the lung, breast, and ovary, in

pathology to classify tumors of unknown primary origin, and in developmental biology to study epithelial differentiation.

Research using clone rOV-TL12/30 has clarified how CK7 expression patterns contribute to tumor classification and patient management. For example, CK7 positive and CK20 negative staining is typical of lung and breast carcinomas, while other combinations point to gastrointestinal or urothelial cancers. This diagnostic utility underscores the importance of CK7 detection in pathology.

Beyond diagnostics, clone rOV-TL12/30 supports studies in tissue biology and regenerative research. CK7 expression marks certain progenitor cells and contributes to understanding how epithelia maintain integrity and respond to injury. This antibody continues to support both basic and translational studies across multiple fields.

NSJ Bioreagents provides this Recombinant Cytokeratin 7 antibody to support studies in cancer biology, epithelial development, and diagnostic pathology. Alternate names include KRT7 antibody, CK7 antibody, keratin 7 antibody, and simple epithelium cytoskeletal protein antibody.

Application Notes

The stated application concentrations are suggested starting amounts. Optimal dilution of the recombinant 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

OTN 11 cells (ovarian carcinoma cell line) were used as the immunogen for the recombinant Cytokeratin 7 antibody.

Storage

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