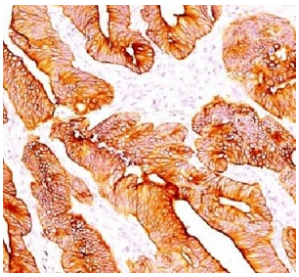
Pan CK Antibody C11 / Multi Cytokeratin Monoclonal Antibody [clone C11] (V2331)

Catalog No.	Formulation	Size
V2331-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2331-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2331SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V2331IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

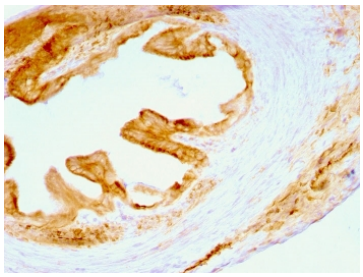
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Bulk quote request

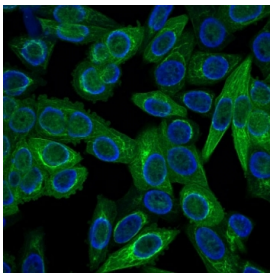
Species Reactivity	Human, Mouse, Rat
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	C11
Purity	Protein G affinity chromatography
Gene ID	3851 (CK4); 3852 (CK5); 3853 (CK6); 3856 (CK8); 3858 (CK10); 3860 (CK13); 3875 (CK18)
Localization	Cytoplasmic
Applications	Flow cytometry: 1-2ug/10^6 cells Immunofluorescence: 1-4ug/ml Western blot: 1-2ug/ml Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT
Limitations	This Pan CK Antibody C11 / Multi Cytokeratin Monoclonal Antibody is available for research use only.



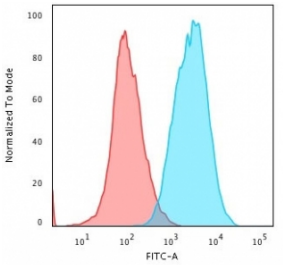
Pan CK Antibody C11 by IHC in Human Colon Carcinoma. Immunohistochemistry of FFPE human colon carcinoma tissue using Pan CK Antibody C11. Strong brown cytoplasmic staining is observed throughout the malignant glandular epithelial structures, including cells lining irregular luminal spaces. The Multi Cytokeratin Monoclonal Antibody highlights the epithelial tumor compartments, while the surrounding stromal regions show considerably weaker staining. Nuclei are counterstained blue with hematoxylin. The staining pattern is consistent with the broad cytokeratin recognition profile of clone C11.



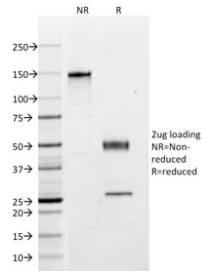
Pan CK Antibody C11 by IHC in Rat Oviduct. Immunohistochemistry of FFPE rat oviduct tissue using Pan CK Antibody C11. Brown cytoplasmic staining highlights the epithelial cells lining the oviduct lumen and its mucosal folds. The surrounding connective tissue exhibits comparatively weak staining, providing contrast with the positively stained epithelial structures. The Multi Cytokeratin Monoclonal Antibody demonstrates reactivity with rat epithelial cytokeratins, consistent with the reported cross-species recognition of clone C11. Nuclei are counterstained blue with hematoxylin.



Pan CK Antibody C11 by IF in Human HeLa Cells. Immunofluorescence staining of permeabilized human HeLa cells using Pan CK Antibody C11. Green fluorescence highlights an extensive cytoplasmic filament network, with prominent perinuclear staining and filamentous structures extending toward the cell periphery. The Multi Cytokeratin Monoclonal Antibody reveals the characteristic organization of epithelial intermediate filaments. Cell nuclei are counterstained blue with DAPI, providing clear visualization of the cytoplasmic distribution of cytokeratin proteins.



Pan CK Antibody C11 by FACS in Human HeLa Cells. Flow cytometry analysis of permeabilized human HeLa cells using Pan CK Antibody C11. The blue histogram representing antibody staining shows a pronounced rightward fluorescence shift relative to the red isotype control histogram. The Multi Cytokeratin Monoclonal Antibody demonstrates strong intracellular cytokeratin detection in HeLa cells, with clear separation between the antibody-positive population and the control. The fluorescence shift supports the antibody's ability to recognize cytokeratin antigens under the tested permeabilization conditions.



Pan CK Antibody C11 by SDS-PAGE. SDS-PAGE analysis of purified, BSA-free Pan CK Antibody C11 under non-reducing (NR) and reducing (R) conditions, with 2 ug of antibody loaded per lane. The non-reducing lane shows a prominent band at approximately 150 kDa, consistent with intact IgG. Under reducing conditions, distinct bands appear at approximately 50 kDa and 25 kDa, corresponding to the immunoglobulin heavy and light chains, respectively. The electrophoretic profile is consistent with the expected composition of a purified mouse monoclonal antibody preparation.

Description

Pan CK Antibody C11 is a mouse monoclonal antibody recognizing seven cytokeratin proteins: CK4, CK5, CK6, CK8, CK10, CK13, and CK18. Cytokeratins are intermediate filament proteins that provide mechanical stability and maintain the structural organization of epithelial cells. They are classified into type I acidic and type II basic keratins, which assemble into heterodimers and subsequently form cytoplasmic filament networks. Because different epithelial tissues express characteristic combinations of keratins, antibodies recognizing multiple family members are valuable for identifying epithelial populations across diverse tissue types.

Clone C11 recognizes keratins associated with both simple and stratified epithelia. CK5 and CK6 are characteristic of basal and proliferative epithelial compartments, while CK4 and CK13 are associated with differentiated non-keratinized squamous epithelia. CK8 and CK18 are prominent in simple glandular epithelia, and CK10 is associated with suprabasal differentiation in keratinizing stratified epithelia. This recognition profile provides broad epithelial coverage through a single monoclonal antibody rather than a mixture of antibodies. However, C11 does not recognize every cytokeratin family member, making its defined target spectrum important when interpreting experimental results.

Broad-spectrum cytokeratin detection is widely used in cancer research to investigate epithelial tumor identity and distinguish carcinoma cells from surrounding stromal and inflammatory populations. Cytokeratin staining can reveal tumor nests, glandular structures, and epithelial cells dispersed within heterogeneous tissue specimens. Pan CK antibodies are also useful for studying epithelial differentiation, tissue remodeling, and changes in epithelial phenotype during tumor progression. In studies of epithelial-mesenchymal transition, altered cytokeratin expression may provide evidence of changing cellular characteristics, although additional markers are required to characterize these processes accurately.

NSJ Bioreagents offers Pan CK Antibody C11, developed using a keratin-enriched preparation from cultured human A431 cells. This established monoclonal antibody recognizes multiple cytokeratins while retaining the consistency associated with a single defined clone. Its broad reactivity supports epithelial cell identification in human, mouse, and rat samples. The Multi Cytokeratin Monoclonal Antibody provides a useful alternative to antibody cocktails for researchers investigating epithelial differentiation, carcinoma-associated keratin expression, and cellular organization. A Pan CK Antibody such as clone C11 offers broad cytokeratin recognition for examining epithelial populations across diverse experimental models.

Explore our widely cited Pan Cytokeratin Antibody AE1/AE3 cocktail for broad epithelial cell identification, carcinoma research, and detection of acidic and basic cytokeratins.

Application Notes

The concentration stated for each application is a general starting point. Variations in protocols, secondaries and substrates may require the Pan CK Antibody C11 / Multi Cytokeratin Monoclonal Antibody to be titered up or down for optimal performance.

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.
2. 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

A keratin-enriched preparation from cultured human A431 was used as the immunogen for this Multi Cytokeratin antibody.

Storage

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

Alternate Names

Pan Cytokeratin antibody, Pan Keratin antibody, Multi Cytokeratin antibody, Broad Spectrum Cytokeratin antibody, Epithelial Marker antibody, Cytokeratin Cocktail Alternative antibody

References (3)

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