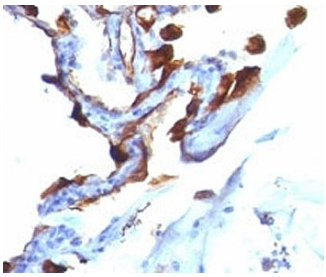
Cytokeratin 8/18 Antibody C-51 / Epithelial Marker Antibody [clone C-51] (V3073)

Catalog No.	Formulation	Size
V3073-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3073-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3073SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V3073IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

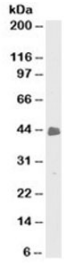
Citations (6)

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	C-51
Purity	Protein G affinity chromatography
UniProt	P05787, P05783
Localization	Cytoplasmic
Applications	Flow cytometry: 1-2ug/10^6 cells Immunofluorescence: 1-2ug/ml Western blot: 1-2ug/ml Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT
Limitations	This Cytokeratin 8/18 Antibody C-51 / Epithelial Marker Antibody is available for research use only.



Cytokeratin 8/18 Antibody C-51 Human Lung Carcinoma IHC. Immunohistochemistry staining of FFPE human lung carcinoma tissue was performed with Cytokeratin 8/18 Antibody C-51. Strong cytokeratin staining is observed in epithelial tumor cells, consistent with expression of the CK8/CK18 intermediate filament system. This Cytokeratin 8/18 Antibody demonstrates epithelial marker staining in human lung carcinoma and supports the use of clone C-51 for studies of epithelial differentiation and carcinoma biology.



Cytokeratin 8/18 Antibody C-51 Human HeLa Cervical Cancer Cell WB. Western blot analysis of human HeLa cervical cancer cell lysate was performed with Cytokeratin 8/18 Antibody C-51. The predicted molecular weights of CK8 and CK18 are approximately 53 and 48 kDa, respectively, with a prominent immunoreactive band observed here at approximately 43 kDa. This Cytokeratin 8/18 Antibody demonstrates detection of the epithelial cytokeratin system in human HeLa cells using clone C-51.

Description

Cytokeratin 8/18 Antibody C-51 / Epithelial Marker Antibody recognizes the cytokeratin 8 and 18 intermediate filament system characteristic of many simple epithelial cells. Cytokeratin 8 (CK8/KRT8) is a type II intermediate filament protein that commonly pairs with the type I protein cytokeratin 18 (CK18/KRT18). Together, CK8 and CK18 form an important component of the cytoskeletal network that helps maintain epithelial cell structure, mechanical stability and tissue organization.

CK8 and CK18 are broadly expressed in simple epithelia and are commonly studied as markers of epithelial differentiation. Their expression is found in tissues including liver, kidney, gastrointestinal tract and many glandular epithelia. A Cytokeratin 8/18 Antibody can therefore support studies examining epithelial cell identity, intermediate filament organization and changes in cytoskeletal composition during differentiation and tissue remodeling.

The CK8/CK18 system is also extensively investigated in cancer biology. These cytokeratins are retained in many epithelial-derived malignancies and can be used to study carcinoma cells and their differentiation. Changes in CK8 or CK18 expression, organization and processing have been associated with cellular stress, tumor progression and alterations in epithelial phenotype. Because expression patterns vary among tumor types and states of differentiation, cytokeratin analysis can provide useful information when characterizing epithelial-derived cells and tissues.

Beyond their structural role, CK8 and CK18 participate in cellular responses to mechanical and metabolic stress and interact with proteins involved in signaling and cytoskeletal regulation. Their intermediate filament network can undergo dynamic reorganization and post-translational modification in response to changing cellular conditions. The established C-51 monoclonal antibody has been used extensively in published research, making it a useful reagent for continued investigation of CK8/CK18 expression in epithelial biology and disease.

NSJ Bioreagents offers Cytokeratin 8/18 Antibody C-51 for investigating epithelial cytokeratin expression and organization. An Epithelial Marker Antibody targeting the CK8/CK18 system can support research into epithelial differentiation, intermediate filament biology, cellular stress and carcinoma-associated changes in cytokeratin expression.

Researchers studying CK8/CK18 expression and epithelial differentiation can explore our Cytokeratin Antibodies page for additional markers of epithelial structure, differentiation and carcinoma biology.

Application Notes

Optimal dilution of the Cytokeratin 8/18 Antibody C-51 / Epithelial Marker Antibody should be determined by the researcher.

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 min.
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 cytoskeleton preparation from HeLa cells was used as the immunogen for the Cytokeratin 8/18 antibody.

Storage

Store the Cytokeratin 8/18 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

Cytokeratin 8/18 antibody, CK8/18 antibody, Keratin 8/18 antibody, KRT8/KRT18 antibody, Epithelial Marker antibody, Cytokeratin 8 antibody, Cytokeratin 18 antibody, CK8 antibody, CK18 antibody

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