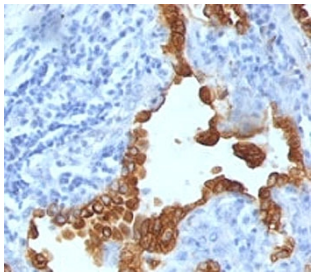
# Cytokeratin 8/18 Antibody SPM141 / Mouse Monoclonal [clone SPM141] (V3113)

| Catalog No. | Formulation | Size |
|---|---|---|
| V3113-100UG | 0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide | 100 ug |
| V3113-20UG | 0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide | 20 ug |
| V3113SAF-100UG | 1 mg/ml in 1X PBS; BSA free, sodium azide free | 100 ug |
| V3113IHC-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** | SPM141 |
| **Purity** | Protein G affinity chromatography |
| **UniProt** | P05787, P05783 |
| **Localization** | Cytoplasmic |
| **Applications** | Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT (1)<br>Prediluted IHC only format: incubate for 30 min at RT (2) |
| **Limitations** | This Cytokeratin 8/18 Antibody SPM141 is available for research use only. |



Cytokeratin 8/18 Antibody SPM141 Human Lung Carcinoma IHC. Immunohistochemistry staining of FFPE human lung carcinoma tissue was performed with Cytokeratin 8/18 Antibody, clone SPM141. Strong cytoplasmic staining is observed in epithelial tumor cells, with comparatively little staining in the surrounding tissue. This Cytokeratin 8/18 Antibody demonstrates CK8/CK18 expression in human lung carcinoma and supports the use of clone SPM141 for studies of epithelial differentiation and carcinoma biology.

## Description

Cytokeratin 8/18 Antibody SPM141 is a mouse monoclonal antibody developed against a keratin preparation from human MCF-7 breast carcinoma cells. Cytokeratin 8 (CK8/KRT8) is a type II intermediate filament protein that is characteristically expressed together with the type I protein cytokeratin 18 (CK18/KRT18) in many simple epithelial cells. The CK8/CK18 intermediate filament network contributes to epithelial cell architecture, mechanical stability and maintenance of tissue integrity. Clone SPM141 is characterized for human reactivity and has been used to examine cytokeratin expression in epithelial tissues and cells.

CK8 and CK18 are widely distributed throughout simple and glandular epithelia. Expression is found in epithelial tissues of the breast, gastrointestinal tract, respiratory tract and urogenital system, among others. Their characteristic epithelial distribution makes Cytokeratin 8/18 Antibody useful for investigating epithelial differentiation, intermediate filament organization and changes in cytoskeletal composition associated with normal and disease-related cellular states.

The CK8/CK18 system is particularly relevant to cancer research because these keratins are retained in many epithelial-derived malignancies. Cytokeratin 8/18 expression can be investigated in adenocarcinomas and other carcinomas to study epithelial phenotype and tumor differentiation. Expression patterns can vary with tumor type and differentiation state, providing a basis for examining changes in epithelial intermediate filaments during malignant transformation and tumor progression.

Beyond their roles as epithelial markers, CK8 and CK18 are dynamic components of the cytoskeleton. Their organization and post-translational modification can change in response to cellular stress, injury and signaling events. These properties make the CK8/CK18 network relevant to research extending from epithelial cell structure to stress responses and carcinoma biology.

NSJ Bioreagents offers mouse monoclonal Cytokeratin 8/18 Antibody clone SPM141 for investigating epithelial cytokeratin expression. The SPM141 clone can support research into CK8/CK18 expression, simple epithelial differentiation, intermediate filament organization and carcinoma-associated changes in epithelial phenotype.

Researchers studying the K8/K18 intermediate filament system can explore our Cytokeratin 8/18 Antibody page for additional reagents targeting these widely expressed epithelial keratins.

## Application Notes

Optimal dilution of the Cytokeratin 8/18 Antibody SPM141 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 Keratin preparation from human breast carcinoma MCF-7 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, CK8 CK18 antibody, KRT8 KRT18 antibody, KRT8/KRT18 antibody, Cytokeratin 8 antibody, Cytokeratin 18 antibody, Epithelial Cytokeratin antibody


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