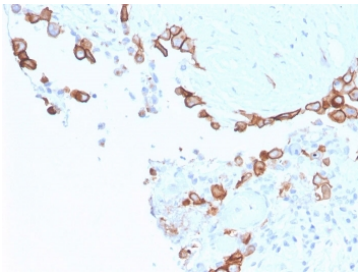
MSLN Antibody / Microarray Specificity Validated Antibody [clone MSLN/3387] (V8693)

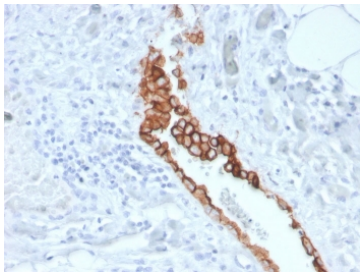
Catalog No.	Formulation	Size
V8693-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V8693-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V8693SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

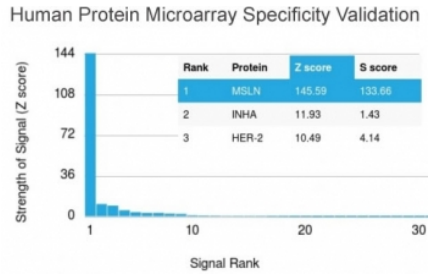
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	MSLN/3387
Purity	Protein G affinity chromatography
UniProt	Q13421
Localization	Cytoplasmic, cell surface, secreted
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 minutes at RT Western Blot : 2-4ug/ml
Limitations	This MSLN Antibody / Microarray Specificity Validated Antibody is available for research use only.



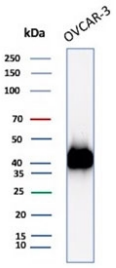
MSLN Antibody Mesothelioma IHC. Immunohistochemistry analysis of mesothelin (MSLN) expression in FFPE human mesothelioma. Tumor cells demonstrate membranous HRP-DAB brown staining with focal cytoplasmic signal, consistent with mesothelin cell surface localization and processing. The staining pattern highlights mesothelial tumor cell populations with low background in surrounding stromal elements. The clean, selective signal aligns with microarray specificity validated performance, supporting high-confidence detection of MSLN in tissue sections. Heat-induced epitope retrieval was performed using pH 9 Tris-EDTA buffer.



IHC staining of FFPE human mesothelioma with MSLN antibody. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



MSLN Antibody Microarray Specificity Validation. Analysis of a HuProt(TM) human protein microarray containing more than 19,000 full-length human proteins using clone MSLN/3387 demonstrates highly selective binding to MSLN. The antibody shows a dominant signal for MSLN with a strong Z-score and clear separation from all other proteins, indicating exceptional specificity and minimal cross-reactivity across the proteome.
The Z-score reflects signal intensity relative to the overall array, expressed as standard deviations above the mean. The S-score represents the difference between adjacent ranked Z-scores and provides a measure of target specificity. The large separation between MSLN and secondary targets supports high-confidence detection of mesothelin in complex biological samples.



Western blot testing of human OVCAR-3 cell lysate with specificity validated MSLN antibody. Predicted molecular weight ~70 kDa (precursor), ~40 kDa (processed form).

Description

MSLN (Mesothelin) is a cell surface glycoprotein encoded by the MSLN gene and is selectively expressed in mesothelial cells while being strongly upregulated in multiple cancers, including mesothelioma, ovarian carcinoma, and pancreatic adenocarcinoma. MSLN Antibody is widely used for detection of gene-associated protein expression in both tissue-based and biochemical assays. MSLN Antibody / Microarray Specificity Validated Antibody provides high-confidence detection of mesothelin, supported by comprehensive proteome-wide specificity validation.

MSLN antibody, also referred to as mesothelin gene product antibody or tumor-associated antigen antibody, produces distinct membranous and cytoplasmic staining consistent with surface localization and proteolytic processing of the protein. In immunohistochemistry, tumor cells typically demonstrate strong and continuous membranous staining, while most normal tissues exhibit limited or focal expression confined to mesothelial surfaces and select epithelial compartments. This differential staining profile supports a predominantly tumor-associated expression pattern and enables clear interpretation across tissue types.

This antibody has been evaluated using a HuProt(TM) human protein microarray platform containing more than 19,000 full-length human proteins, demonstrating highly selective binding to MSLN with a dominant signal and strong Z-score separation from all other targets. The substantial specificity gap indicates minimal cross-reactivity and supports reliable detection of mesothelin in complex biological systems, including heterogeneous tissues and cell lysates.

In western blot analysis, MSLN is detected as a ~70 kDa precursor protein and a ~40-50 kDa processed form generated through proteolytic cleavage. The processed form is frequently the dominant band observed in cancer cell lines, reflecting active maturation and membrane-associated function. Variation in apparent molecular weight may occur due to

glycosylation or processing state, and band interpretation should account for these biologically relevant modifications.

MSLN plays a functional role in tumor biology through interaction with MUC16 (CA125), contributing to tumor cell adhesion and metastatic dissemination within serosal environments. Its restricted expression in normal tissues combined with strong upregulation in malignancy supports its use as both a biomarker and therapeutic target. Overall, MSLN Antibody provides validated, high-specificity detection of mesothelin, enabling precise analysis of gene-associated protein expression across immunohistochemistry and western blot applications.

This Mesothelin antibody is part of a broader Mesothelin antibody panel offered by NSJ Bioreagents.

Application Notes

Optimal dilution of the MSLN Antibody / Microarray Specificity Validated Antibody should be determined by the researcher.

Immunogen

A portion of amino acids 273-407 from the human protein was used as the immunogen for the MSLN antibody.

Storage

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

Alternate Names

MSLN antibody, Mesothelin antibody, Mesothelin gene product antibody, Tumor antigen MSLN antibody, CA125-binding protein antibody