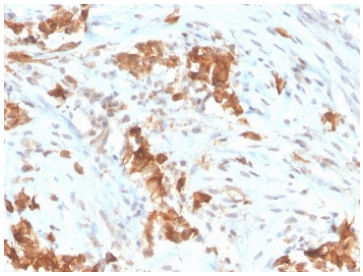
Mesothelin Antibody / Microarray Specificity Validated Antibody [clone MSLN/3385] (V8689)

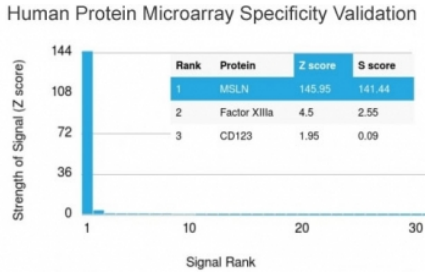
Catalog No.	Formulation	Size
V8689-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V8689-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V8689SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

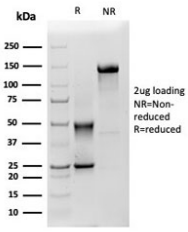
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b, kappa
Clone Name	MSLN/3385
Purity	Protein G affinity chromatography
UniProt	Q13421
Localization	Cytoplasmic, cell surface, secreted
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 minutes at RT Western Blot : 2-4ug/ml
Limitations	This Mesothelin Antibody / Microarray Specificity Validated Antibody is available for research use only.



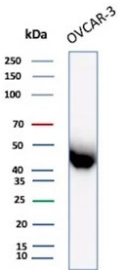
Mesothelin Antibody Mesothelioma IHC. Immunohistochemistry analysis of mesothelin expression in FFPE human mesothelioma using clone MSLN/3385. Tumor cells demonstrate membranous HRP-DAB brown staining with focal cytoplasmic signal, consistent with mesothelin surface localization. The staining pattern highlights mesothelial tumor cell populations while maintaining low background in surrounding stromal elements. The clear and selective signal is consistent with microarray specificity validated performance, supporting high-confidence detection of mesothelin in tissue sections. Heat-induced epitope retrieval was performed using pH 9 Tris-EDTA buffer.



Mesothelin Antibody Microarray Specificity Validation. Analysis of a HuProt(TM) human protein microarray containing more than 19,000 full-length human proteins using clone MSLN/3385 demonstrates highly selective binding to mesothelin (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 off-target reactivity.
The Z-score reflects the signal intensity for each protein 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 identification of mesothelin in complex biological samples.



SDS-PAGE analysis of purified, BSA-free Mesothelin antibody (clone MSLN/3385) as confirmation of integrity and purity.



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

Description

Mesothelin is a glycosylphosphatidylinositol-anchored cell surface protein with restricted expression in normal mesothelial cells lining serosal surfaces, but marked overexpression across multiple malignancies including mesothelioma, ovarian carcinoma, and pancreatic adenocarcinoma. Mesothelin Antibody is widely used to evaluate tumor-associated mesothelin expression in both tissue and cell-based assays. Mesothelin Antibody / Microarray Specificity Validated Antibody enables high-confidence detection of mesothelin, supported by proteome-scale validation of target selectivity.

Mesothelin antibody, also referred to as mesothelioma-associated antigen antibody or tumor-associated mesothelin antibody, produces characteristic membranous and cytoplasmic staining consistent with cell surface localization and proteolytic processing. In immunohistochemistry, strong and often diffuse staining is observed in mesothelioma and epithelial malignancies, where tumor cells demonstrate prominent surface labeling and cohesive distribution. In contrast, most normal tissues demonstrate limited or focal staining, with expression primarily restricted to mesothelial surfaces and select epithelial structures, supporting a predominantly tumor-associated expression pattern.

This antibody has been validated using a human protein microarray platform containing over 19,000 full-length human proteins, demonstrating highly selective binding to mesothelin with a dominant signal and clear separation from secondary targets. The strong Z-score enrichment and minimal off-target interaction profile provide robust evidence of specificity, supporting accurate interpretation of both immunohistochemical staining and western blot banding patterns in complex biological samples.

In western blot applications, mesothelin is detected as both a ~70 kDa precursor protein and a ~40-50 kDa processed form generated through proteolytic cleavage. In many tumor-derived cell lines, the processed form is the predominant species observed, reflecting active protein maturation and membrane association. Occasional higher molecular weight

bands may represent incompletely processed or glycosylated forms, and should be interpreted within the context of mesothelinÃ¢Â€Â™s known post-translational processing.

Functionally, mesothelin contributes to tumor progression through interaction with MUC16 (CA125), promoting tumor cell adhesion and dissemination within serosal environments. Its restricted normal tissue distribution combined with elevated tumor expression underpins its importance as a diagnostic biomarker and therapeutic target. Overall, Mesothelin Antibody provides highly specific and validated detection of mesothelin, supporting confident analysis of tumor-associated 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 Mesothelin 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 Mesothelin antibody.

Storage

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

Alternate Names

Mesothelin antibody, MSLN antibody, Mesothelioma antigen antibody, Tumor-associated mesothelin antibody, CA125-binding protein antibody