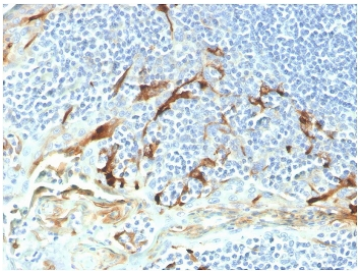
Mesothelin Antibody / Biotinylated Detection Antibody [clone MSLN/2131] (V3820BTN)

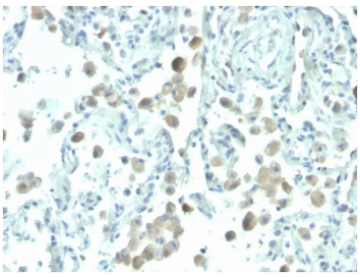
Catalog No.	Formulation	Size
V3820BTN	0.1 mg/ml with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	500 ul

Bulk quote request

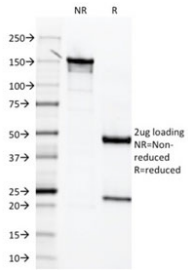
Availability	1-3 business days
Species Reactivity	Human, Mouse and Rat
Format	Biotin Conjugate
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b, kappa
Clone Name	MSLN/2131
Purity	Protein G affinity chromatography
UniProt	Q13421
Localization	Cytoplasmic, cell surface, secreted
Applications	Immunohistochemistry (FFPE): 2-4ug/ml for 30 minutes at RT
Limitations	This Mesothelin Antibody / Biotinylated Detection Antibody is available for research use only.



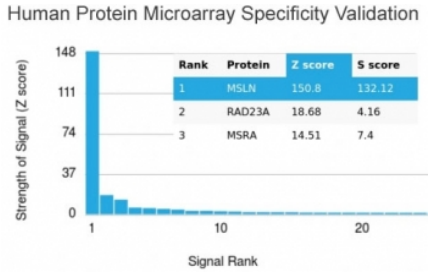
Biotinylated Mesothelin Antibody Endometrial Carcinoma IHC. Immunohistochemistry analysis of mesothelin expression in FFPE human endometrial carcinoma using biotinylated clone MSLN/2131. Tumor epithelial cells demonstrate membranous HRP-DAB brown staining with focal cytoplasmic signal, consistent with mesothelin surface localization. The biotinylated detection format enables enhanced signal intensity and improved visualization of tumor cell populations, particularly in regions with lower expression, while surrounding stromal elements remain low in background staining. Heat-induced epitope retrieval was performed using pH 9 Tris-EDTA buffer.



Biotinylated Mesothelin Antibody Human Lung IHC. Immunohistochemistry analysis of mesothelin expression in FFPE human lung using biotinylated clone MSLN/2131. Focal membranous HRP-DAB brown staining is observed in epithelial structures with low background in surrounding tissue, consistent with limited physiologic mesothelin expression. The biotinylated detection format enhances signal visibility and improves contrast, supporting detection of low-level expression in normal tissue compartments. Heat-induced epitope retrieval was performed using pH 9 Tris-EDTA buffer.



SDS-PAGE analysis of purified, BSA-free Mesothelin antibody (clone MSLN/2131) as confirmation of integrity and purity.



Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using Mesothelin antibody (clone MSLN/2131). These results demonstrate the foremost specificity of the MSLN/2131 mAb. Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt(TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt(TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.

Description

Mesothelin is a glycosylphosphatidylinositol-anchored cell surface protein with restricted expression in normal mesothelial cells and marked overexpression in malignancies including mesothelioma, ovarian carcinoma, and pancreatic adenocarcinoma. Mesothelin Antibody is widely used to evaluate tumor-associated expression in tissue and cell-based assays. Mesothelin Antibody / Biotinylated Detection Antibody provides an optimized format for sensitive target detection, enabling enhanced signal generation and flexible integration across multiple immunoassay platforms.

Mesothelin antibody, also referred to as MSLN antibody or mesothelioma-associated antigen antibody, produces characteristic membranous and cytoplasmic staining consistent with cell surface localization and proteolytic processing. In immunohistochemistry, tumor cells typically demonstrate strong surface labeling and cohesive distribution patterns, while most normal tissues show limited or focal staining confined to mesothelial surfaces and select epithelial structures. This differential expression pattern supports reliable identification of mesothelin-positive tumor cells and reinforces its utility as a tumor-associated marker.

The biotinylated format enables use with streptavidin-based detection systems, providing signal amplification and improved sensitivity compared to directly labeled antibodies. This approach is particularly advantageous for detecting low-abundance targets, resolving weak staining, and enhancing contrast in complex tissue backgrounds. The flexibility of biotin-streptavidin systems allows researchers to tailor detection strategies across immunohistochemistry, ELISA, and related assay formats without compromising target recognition.

In protein analysis applications such as western blot, mesothelin is detected as both a ~70 kDa precursor and a ~40-50 kDa processed form generated through proteolytic cleavage. The processed form is frequently the dominant species observed in tumor-derived samples, reflecting active protein maturation and membrane-associated function. Incorporating a biotinylated detection strategy can improve visualization of these species, particularly in samples with low expression or

reduced signal intensity.

Functionally, mesothelin contributes to tumor progression through interaction with MUC16 (CA125), promoting tumor cell adhesion and dissemination within serosal environments. The availability of a biotinylated antibody format expands experimental versatility while maintaining high-confidence detection of mesothelin. Overall, Mesothelin Antibody provides sensitive, adaptable, and reliable detection of mesothelin expression across a range of research applications.

For tumor-associated expression and staining patterns, see our Mesothelin antibody tumor marker page.

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

Application Notes

Optimal dilution of the Mesothelin Antibody / Biotinylated Detection 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 (up to one month) or aliquot and store at -20oC (longer term).

Alternate Names

Mesothelin antibody, MSLN antibody, Biotinylated mesothelin antibody, Tumor marker antibody, CA125-binding protein antibody

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