Anti-Mesothelin (MOUSE) Monoclonal Antibody - 200-301-A87S

Code: 200-301-A87S **Size:** 25 µL

Product Description: Anti-Mesothelin (MOUSE) Monoclonal Antibody - 200-301-A87S

Concentration: 1.0 mg/mL by UV absorbance at 280 nm

PhysicalState: Liquid (sterile filtered)

Label	Unconjugated
Host	Mouse
Gene Name	MSLN
Species Reactivity	human
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Stabilizer	None
Preservative	0.01% (w/v) Sodium Azide
Storage Condition	Store vial at -20° C or below prior to opening. This vial contains a relatively low volume of reagent (25 µL). To minimize loss of volume dilute 1:10 by adding 225 µL of the buffer stated above directly to the vial. Recap, mix thoroughly and briefly centrifuge to collect the volume at the bottom of the vial. Use this intermediate dilution when calculating final dilutions as recommended below. Store the vial at -20°C or below after dilution. Avoid cycles of freezing and thawing.
Synonyms	Mesothelian, MN, MB, Pre-pro-megakaryocyte-potentiating factor, CAK1 antigen
Application Note	This antibody has been tested for use in immunohistochemistry and western blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 40 kDa in size corresponding to mature mesothelin by western blotting in the appropriate cell lysate or extract. For immunohistochemistry, archival PEFF human tissues were deparaffinized followed by hydration. Antigen-retrieval is recommended. Block tissues with 1% BSA in PBS for 30 min at 23° C. Antibodies are diluted in 1% BSA and reacted with tissue for 60 min at room temperature.
Background	Mesothelin is a glycosyl-phosphatidyl- inositol–anchored glycoprotein present on the cell surface of various human solid tumors. The mesothelin (MSLN) gene encodes a 71-kDa precursor protein that is processed to a 40-kDa glycosylphosphatidyl-inositol–anchored protein that composes the mature portion and an NH₂-terminal 31-kDa fragment called megakaryocyte-potentiating factor that is released from the cell. Mesothelin is a tumor differentiation antigen present at low levels on a restricted set of normal adult tissues, such as mesothelium, but aberrantly over expressed in mesotheliomas, ovarian, and pancreatic cancers. The biological functions of mesothelin remain elusive. A recent study showed that mesothelin binds to MUC16/CA125, and that this interaction mediates cell adhesion, suggesting that there may be an important role for MUC16/CA125 and mesothelin in the metastatic spread of ovarian cancer.
Purity And Specificity	This antibody is directed against human mesothelin protein. This product was purified from tissue culture supernatant fluid by Protein A chromatography. Cross reactivity with homologues from other sources has not been tested.
Assay Dilutions	User Optimized
ELISA	1:10,000 - 1:50,000
Immunohistochemistry	1:100
WESTERN BLOT	1:1,000
IHC	1:100
OTHER ASSAYS	User Optimized
Expiration	Expiration date is three (3) months from date of opening.
Immunogen	This antibody was produced in mice by repeated immunizations with a recombinant protein corresponding to the extracellular domain of human mesothelin.
General Reference	Chang K, Pastan I, Willingham MC. (1992) Isolation and characterization of a monoclonal antibody reactive with ovarian cancers and normal mesothelium. Int J Cancer 50:373–81. Argani P, Iacobuzio-Danahue C, Ryu B, et al. (2001) Mesothelin is overexpressed in the vast majority of ductal adenocarcinomas of the pancreas: identification of a new pancreatic cancer marker by serial analysis of gene expression (SAGE). Clin Cancer Res 7:3862–8.

Chang K, Pastan I.(1996) Molecular cloning of mesothelin, a differentiation antigen present on mesothelium, mesothelioma, and ovarian cancers. Proc Natl Acad Sci U S A 93:136–40.

Related Products

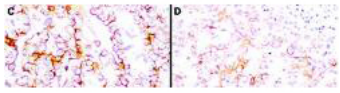
200-301-268	Anti-AKT pS473 (MOUSE) Monoclonal Antibody - 200-301-268
610-4302	Anti-MOUSE IgG (H&L) (RABBIT) Antibody Peroxidase Conjugated - 610-4302
611-1302	Anti-RABBIT IgG (H&L) (GOAT) Antibody Peroxidase Conjugated - 611-1302
B304	NORMAL GOAT SERUM (NGS) - B304

Related Links

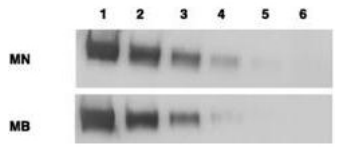
UniProtKB	http://www.uniprot.org/uniprot/Q13421
NCBI	http://www.ncbi.nlm.nih.gov/protein/53988378
NCBI - 53988378	http://www.ncbi.nlm.nih.gov/protein/53988378
UniProt - Q13421	http://www.uniprot.org/uniprot/Q13421
Gene ID - 10232	http://www.ncbi.nlm.nih.gov/gene/10232

Images

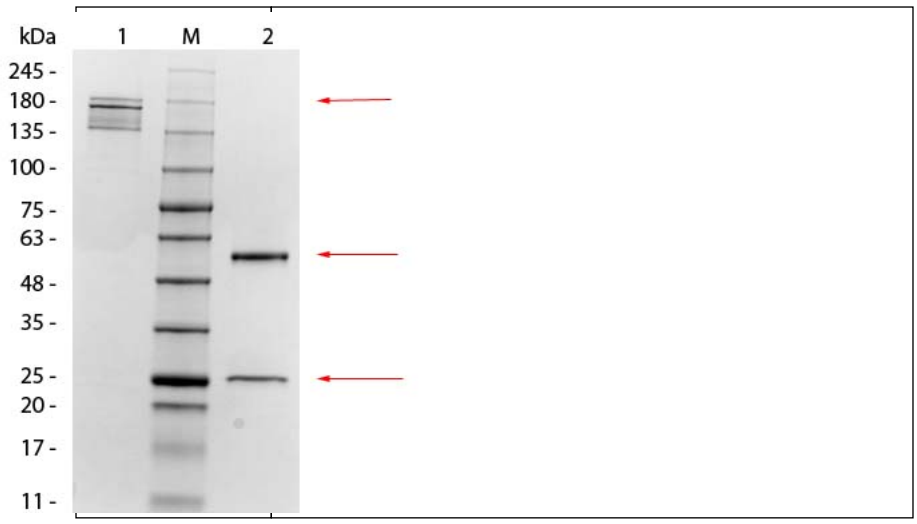
1 Immunohistochemistry using Rockland's anti-mesothelin antibodies to detect mesothelin in PEFF human tissue sections treated by antigen retrieval methods. Anti-mesothelin primary antibodies were used to label these sections as follows: C, MAb MB; and D, MAb MN. Reprinted with permission fromClin.Cancer Res. 11(16):5840-6.



2 Western blotting using Rockland's anti-mesothelin antibodies to detect mesothelin-Fc at 100 ng (lane 1), 25 ng (lane 2), 6 ng (lane 3), 2 ng (lane 4) and 0.4 ng (lane 5). Lane 6 contains 50 ng of CDC25-Fc. Proteins were separated on 4-20% gradient gel by SDS-PAGE followed by transfer to PVDF membrane. Primary antibody was used at 1µg/ml followed by reaction with ALP goat anti-mouse IgG and BCIP/NBT substrate. Reprinted with permission fromClin.Cancer Res. 11(16):5840-6.



3 SDS-PAGE of Mouse anti-Mesothelin Monoclonal Antibody. Lane 1: Non-Reduced Mouse anti-Mesothelin Monoclonal Antibody. Lane 2: 3 µL OPAL Pre-stained Marker (p/n MB-210-0500). Lane 3: Reduced Mouse anti-Mesothelin Monoclonal Antibody. Load: 1 µg per lane. Predicted/Observed size: Non-reduced at 160 kDa; Reduced at 55, 25 kDa.



Disclaimer

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