

**Anti-Mesothelin (MOUSE) Monoclonal Antibody**  
**Mesothelin Antibody**  
**Catalog # ASR4179****Specification**

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**Anti-Mesothelin (MOUSE) Monoclonal Antibody - Product Information**

Host	<b>Mouse</b>
Conjugate	<b>Unconjugated</b>
Target Species	<b>Human</b>
Reactivity	<b>Human</b>
Clonality	<b>Monoclonal</b>
Application	<b>WB, IHC, E, I, LCI</b>
Application Note	<b>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 Anti-mesothelin 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.</b>
Physical State	<b>Liquid (sterile filtered)</b>
Buffer	<b>0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2</b>
Immunogen	<b>This antibody was produced in mesothelin-deficient mice by immunizations with plasmid cDNA encoding human MSLN full length protein followed by a single boost of a recombinant human mesothelin-Fc fusion protein.</b>
Preservative	<b>0.01% (w/v) Sodium Azide</b>

**Anti-Mesothelin (MOUSE) Monoclonal Antibody - Additional Information****Gene ID** 10232**Other Names**  
10232**Purity**

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.

**Storage Condition**

Store antibody at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

**Precautions Note**

This product is for research use only and is not intended for therapeutic or diagnostic applications.

**Anti-Mesothelin (MOUSE) Monoclonal Antibody - Protein Information**

**Name** MSLN

**Synonyms** MPF

**Function**

Membrane-anchored forms may play a role in cellular adhesion.

**Cellular Location**

Cell membrane; Lipid-anchor, GPI-anchor. Golgi apparatus [Isoform 3]: Secreted.

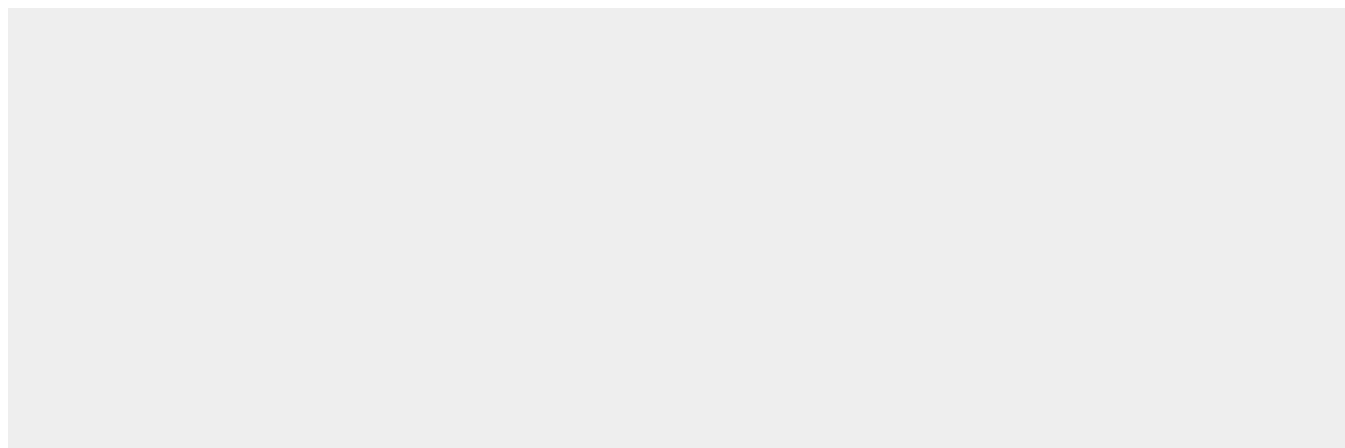
**Tissue Location**

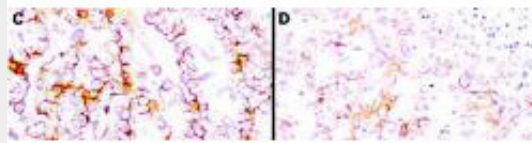
Expressed in lung. Expressed at low levels in heart, placenta and kidney. Expressed in mesothelial cells. Highly expressed in mesotheliomas, ovarian cancers, and some squamous cell carcinomas (at protein level).

**Anti-Mesothelin (MOUSE) Monoclonal Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Anti-Mesothelin (MOUSE) Monoclonal Antibody - Images**



Immunohistochemistry using Rockland's anti-mesothelin antibody to react with two epitopes on mesothelin in PEFF human mesothelioma tissue sections treated by antigen retrieval methods. Anti-mesothelin primary antibodies were used at 10 µg/mL to label these sections as follows: C, MAb MB; and D, MAb MN followed by goat anti-mouse IgG conjugated to horseradish peroxidase at 25 µg/mL in 1% BSA/PBS for 30 minutes. (magnification, ×200; bar, 50 µm). Reprinted with permission from Clin.Cancer Res. 11(16):5840-6.

### **Anti-Mesothelin (MOUSE) Monoclonal Antibody - Background**

Anti Mesothelin Antibody recognizes Mesothelin that is a glycosyl-phosphatidylinositol-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 glycosylphosphatidylinositol-anchored protein that composes the mature portion and an NH<sub>2</sub> 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.