

**Anti-Mesothelin (MOUSE) Monoclonal Antibody**  
**Mesothelin Antibody**  
**Catalog # ASR4181**

**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, flow cytometry, 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.</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 vial 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

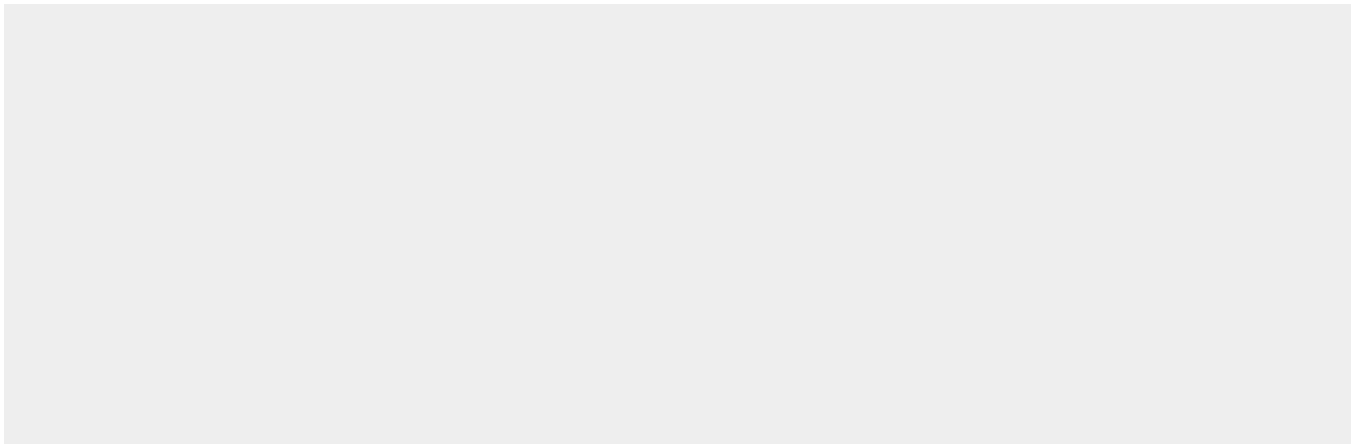
Expressed in lung. Expressed at low levels in heart, placenta and kidney. Expressed in mesothelial cells. Highly expressed in mesotheliomas, ovarian cancers, and some squamous cell carcinomas (at protein level).

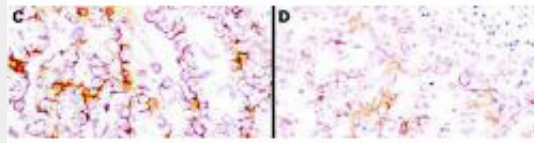
## Anti-Mesothelin (MOUSE) Monoclonal Antibody - Protocols

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  $\mu\text{g}/\text{mL}$  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  $\mu\text{g}/\text{mL}$  in 1% BSA/PBS for 30 minutes. (magnification,  $\times 200$ ; bar, 50  $\mu\text{m}$ ). 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.