# abcam

### Product datasheet

## Anti-Mesothelin antibody [EPR4509] ab133489

Recombinant RabMAb

**5 References** 4 Images

Overview

**Product name** Anti-Mesothelin antibody [EPR4509]

**Description** Rabbit monoclonal [EPR4509] to Mesothelin

**Host species** Rabbit

**Tested applications** Suitable for: WB, IHC-P, IP

Unsuitable for: ICC/IF

Reacts with: Human Species reactivity

**Immunogen** Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

Positive control Human fetal lung, Human breast cancer and HeLa lysates; Human serous ovarian carcinoma

tissue IP: HeLa whole cell lysate.

**General notes** This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with

these species. Please contact us for more information.

**Properties** 

**Form** Liquid

Storage instructions Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

Storage buffer pH: 7.2

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.5% BSA

Protein A purified **Purity** 

Clonality Monoclonal

Clone number EPR4509

**Isotype** IgG

#### **Applications**

The Abpromise guarantee

Our <u>Abpromise guarantee</u> covers the use of ab133489 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/1000 - 1/10000. Predicted molecular weight: 69 kDa.
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
IP		1/40.

**Application notes** Is unsuitable for ICC/IF.

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

Megakaryocyte-potentiating factor (MPF) potentiates megakaryocyte colony formation in vitro.

**Tissue specificity** 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).

Involvement in disease

Note=Antibodies against MSLN are detected in patients with mesothelioma and ovarian cancer.

Sequence similarities

Belongs to the mesothelin family.

Post-translational

Both MPF and the cleaved form of mesothelin are N-glycosylated.

modifications

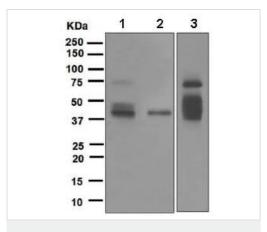
Proteolytically cleaved by a furin-like convertase to generate megakaryocyte-potentiating factor

(MPF), and the cleaved form of mesothelin.

Cellular localization

Secreted and Cell membrane. Golgi apparatus.

#### **Images**



Western blot - Anti-Mesothelin antibody [EPR4509] (ab133489)

**All lanes :** Anti-Mesothelin antibody [EPR4509] (ab133489) at 1/1000 dilution

Lane 1: Human fetal lung lysate

Lane 2: Human breast cancer lysate

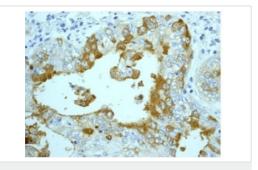
Lane 3: HeLa lysate

Lysates/proteins at 10 µg per lane.

#### Secondary

All lanes: HRP labelled goat anti-rabbit at 1/2000 dilution

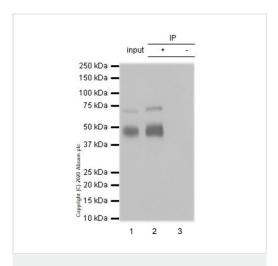
Predicted band size: 69 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Mesothelin antibody
[EPR4509] (ab133489)

Immunohistochemical analysis of Mesothelin in paraffin embedded Human serous ovarian carcinoma tissue, using ab133489 at a dilution of 1/100.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunoprecipitation - Anti-Mesothelin antibody [EPR4509] (ab133489)

Purified ab133489 at 1/40 dilution (2µg) immunoprecipitating Mesothelin in HeLa whole cell lysate.

Lane 1 (input): HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate 10µg

Lane 2 (+): ab133489 + HeLa whole cell lysate.

Lane 3 (-): Rabbit monoclonal IgG (ab172730) instead of ab133489 in HeLa whole cell lysate.

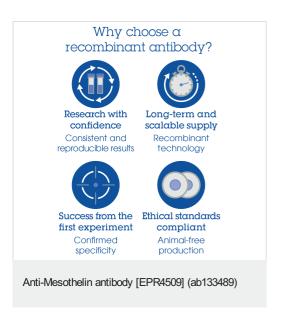
VeriBlot for IP Detection Reagent (HRP) (<u>ab131366</u>) (1/1000 dilution) was used for Western blotting.

Blocking Buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM/TBST.

Observed band size: 40, 71 kDa

The expression profile observed is consistent with what has been described in the literature (PMID: 16857795; PMID: 17332303).



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