abcam

Product datasheet

Anti-Mesothelin antibody [EPR2685(2)] ab134109

Recombinant RabMAb

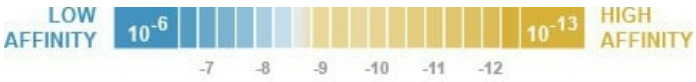
1 References 13 Images

Overview

Product name	Anti-Mesothelin antibody [EPR2685(2)]
Description	Rabbit monoclonal [EPR2685(2)] to Mesothelin
Host species	Rabbit
Tested applications	**Suitable for:** WB, IP, IHC-P **Unsuitable for:** ICC/IF
Species reactivity	**Reacts with:** Human
Immunogen	Synthetic peptide within Human Mesothelin aa 550 to the C-terminus. The exact sequence is proprietary. Database link: **Q13421**
Positive control	WB: HeLa whole cell lysate (**ab150035**); Human fetal lung lysate. OVCAR-3 cell lysate IHC-P: Human mesothelioma and ovarian carcinoma tissue.
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 +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Stable for 12 months at -20°C.
Dissociation constant (K_D)	$K_D = 5.50 \times 10^{-12}$ M



Learn more about K_D

Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 40% Glycerol (glycerin, glycerine), 0.05% BSA, 59% PBS
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR2685(2)
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab134109 in the following tested applications.

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

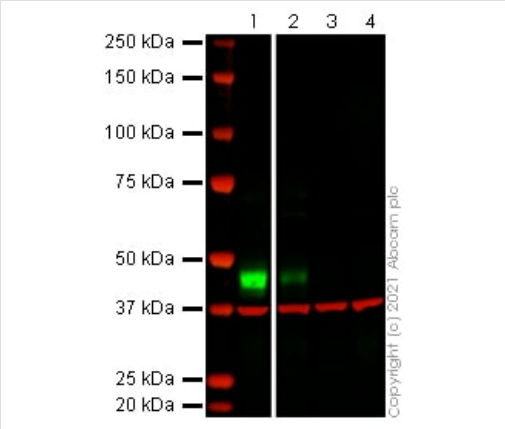
Application	Abreviews	Notes
WB		1/1000 - 1/10000. Detects a band of approximately 40, 69 kDa (predicted molecular weight: 69 kDa).
IP		1/10 - 1/100.
IHC-P		1/500 - 1/2000. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See **IHC antigen retrieval protocols**.

Application notes Is unsuitable for ICC/IF.

Target

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 modifications	Both MPF and the cleaved form of mesothelin are N-glycosylated. 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 [EPR2685(2)] (ab134109)

All lanes : Anti-Mesothelin antibody [EPR2685(2)] (ab134109) at 1/1000 dilution

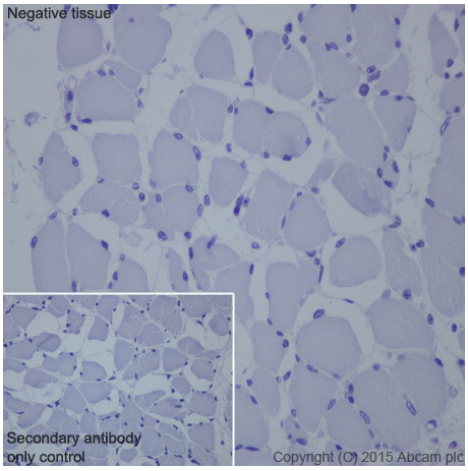
Lane 1 : OVCAR-3 cell lysate
Lane 2 : HeLa cell lysate
Lane 3 : A549 cell lysate
Lane 4 : PC-3 cell lysate

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

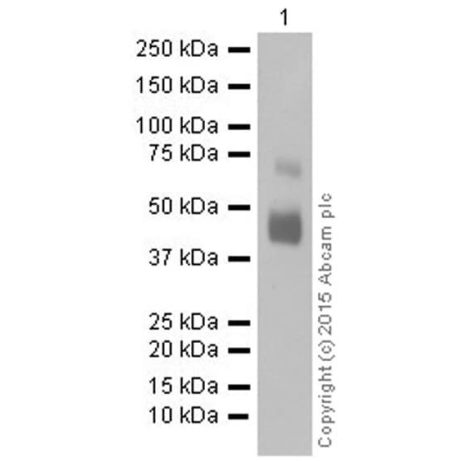
Predicted band size: 69 kDa
Observed band size: 45 kDa

False colour image of Western blot: Anti-Mesothelin antibody [EPR2685(2)] staining at 1/1000 dilution, shown in green; Mouse anti-GAPDH antibody [6C5] (**ab8245**) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab134109 was shown to bind specifically to Mesothelin. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3 % milk in TBS-0.1 % Tween® 20 (TBS-T) before incubation with primary antibodies overnight at 4°C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed (**ab216776**) at 1/20000 dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Mesothelin antibody [EPR2685(2)] (ab134109)

Immunohistochemical staining of paraffin embedded human skeletal muscle with purified ab134109 at a working dilution of 1/800. The secondary antibody used is **ab97051**, a goat anti-rabbit IgG (H&L) at a dilution of 1/500. The sample is counter-stained with hematoxylin. Antigen retrieval was perfomed using Tris-EDTA buffer, pH 9.0. PBS was used instead of the primary antibody as the negative control, and is shown in the inset.



Western blot - Anti-Mesothelin antibody [EPR2685(2)] (ab134109)

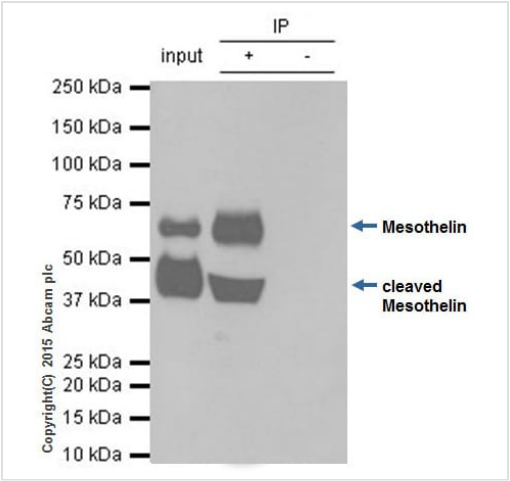
Anti-Mesothelin antibody [EPR2685(2)] (ab134109) at 1/1000 dilution (purified) + HeLa whole cell lysate at 10 µg

Secondary

Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

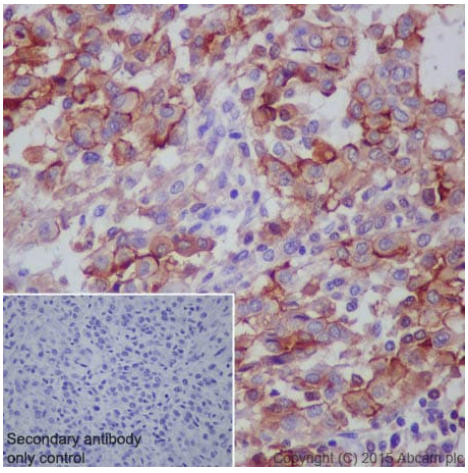
Predicted band size: 69 kDa
Observed band size: 69 kDa
Additional bands at: 40 kDa (possible cleavage fragment)

Blocking buffer: 5% NFDM/TBST
Dilution buffer: 5% NFDM/TBST



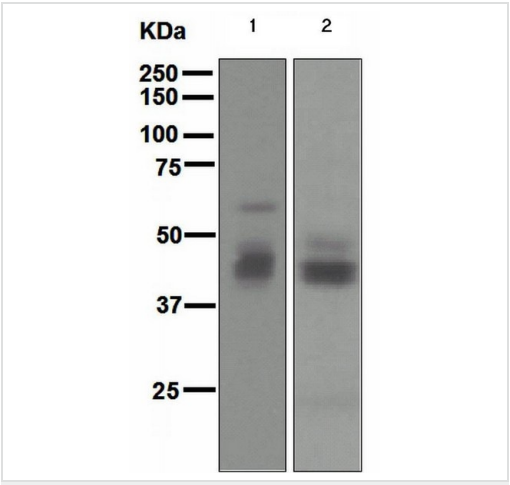
Immunoprecipitation - Anti-Mesothelin antibody [EPR2685(2)] (ab134109)

ab134109 (purified) at 1/40 immunoprecipitating mesothelin in 10 µg HeLa cell lysate (Lanes 1 and 2, observed at 40 and 69 kDa). Lane 3 - Rabbit monoclonal IgG (**ab172730**). For western blotting, VeriBlot for IP Detection Reagent (HRP) (**ab131366**), was used for detection at 1/10,000 dilution. Blocking buffer and concentration: 5% NFDM/TBST Dilution buffer and concentration: 5% NFDM/TBST



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Mesothelin antibody [EPR2685(2)] (ab134109)

Immunohistochemical staining of paraffin embedded human mesothelioma with purified ab134109 at a working dilution of 1/800. The secondary antibody used is **ab97051**, a goat anti-rabbit IgG (H&L) at a dilution of 1/500. The sample is counter-stained with hematoxylin. Antigen retrieval was perfomed using Tris-EDTA buffer, pH 9.0. PBS was used instead of the primary antibody as the negative control, and is shown in the inset.



Western blot - Anti-Mesothelin antibody [EPR2685(2)] (ab134109)

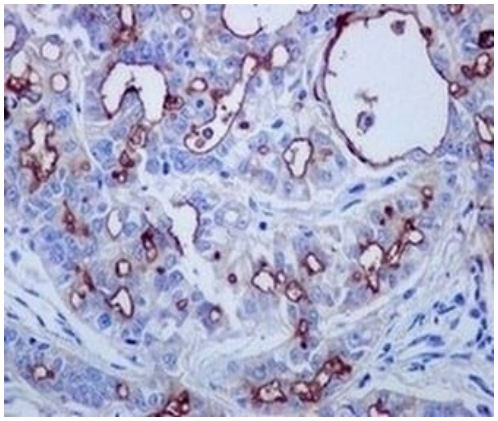
All lanes : Anti-Mesothelin antibody [EPR2685(2)] (ab134109) at 1/1000 dilution (unpurified)

Lane 1 : HeLa cell lysate
Lane 2 : Human fetal lung lysate

Lysates/proteins at 10 µg per lane.

Secondary
All lanes : Goat anti-rabbit HRP conjugated antibody at 1/2000 dilution

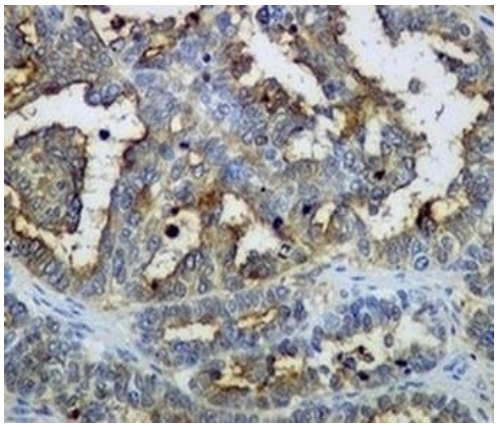
Predicted band size: 69 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Mesothelin antibody [EPR2685(2)] (ab134109)

Immunohistochemical analysis of paraffin embedded Human mesothelioma tissue labelling Mesothelin with unpurified ab134109 at 1/1000.

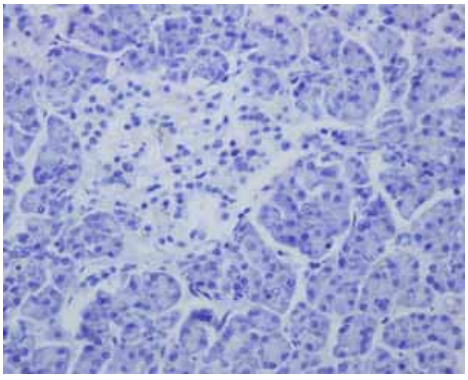
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Mesothelin antibody [EPR2685(2)] (ab134109)

Immunohistochemical analysis of paraffin embedded Human ovarian carcinoma tissue labelling Mesothelin with unpurified ab134109 at 1/1000.

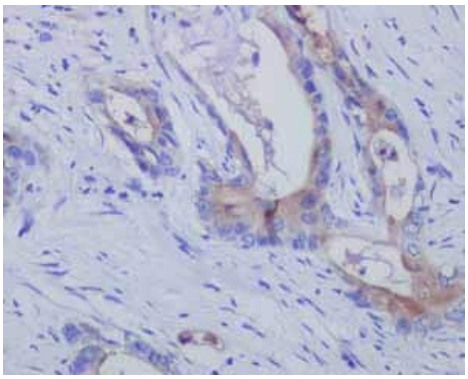
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Mesothelin antibody [EPR2685(2)] (ab134109)

Immunohistochemical analysis of paraffin embedded normal Human pancreas tissue using unpurified ab134109 showing -ve staining.

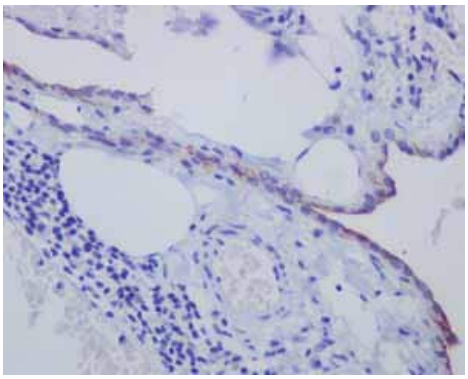
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Mesothelin antibody [EPR2685(2)] (ab134109)

Immunohistochemical analysis of paraffin embedded Human Pancreatic carcinoma tissue using unpurified ab134109 showing +ve staining.

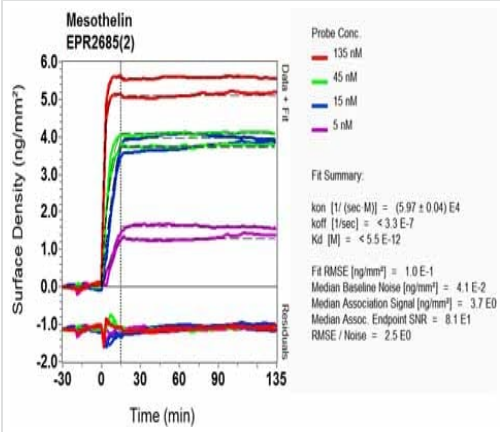
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Mesothelin antibody [EPR2685(2)] (ab134109)

Immunohistochemical analysis of paraffin embedded Human Greator omentum tissue using unpurified ab134109 showing +ve staining.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

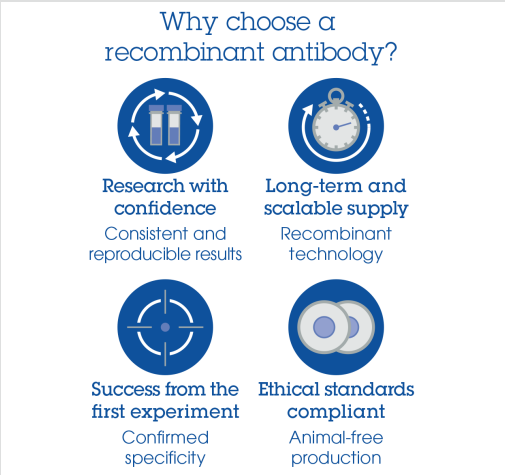


OI-RD Scanning - Anti-Mesothelin antibody [EPR2685(2)] (ab134109)

Equilibrium disassociation constant (K_D)

Learn more about K_D

Click here to learn more about K_D



Anti-Mesothelin antibody [EPR2685(2)] (ab134109)

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