Product datasheet

Anti-Mesothelin antibody [EPR2685(2)] ab134109

11 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. IHC-P: Human mesothelioma and ovarian carcinoma tissue.
General notes: Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

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

We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you have any questions regarding this update, please contact our Scientific Support team.

This product is a recombinant rabbit monoclonal antibody.

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

**Storage buffer**
- pH: 7.40
- Preservative: 0.01% Sodium azide
- Constituents: 40% Glycerol, 0.05% BSA, 59% PBS

**Purity**
- Protein A purified

**Clonality**
- Monoclonal

**Clone number**
- EPR2685(2)

**Isotype**
- IgG

**Applications**

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.

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>WB</td>
<td>1/1000 - 1/10000. Detects a band of approximately 40, 69 kDa (predicted molecular weight: 69 kDa).</td>
<td></td>
</tr>
<tr>
<td>IP</td>
<td>1/10 - 1/100.</td>
<td></td>
</tr>
<tr>
<td>IHC-P</td>
<td>1/500 - 1/2000. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See <a href="#">IHC antigen retrieval protocols</a>.</td>
<td></td>
</tr>
</tbody>
</table>

**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**
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

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
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 performed 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.

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 performed 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.
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

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

Immunohistochemical analysis of paraffin embedded Human ovarian carcinoma tissue labelling Mesothelin with unpurified ab134109 at 1/1000.
Immunohistochemical analysis of paraffin embedded normal Human pancreas tissue using unpurified ab134109 showing -ve staining.

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

Immunohistochemical analysis of paraffin embedded Human Greater omentum tissue using unpurified ab134109 showing +ve staining.
Equilibrium disassociation constant ($K_D$)

Learn more about $K_D$

Click here to learn more about $K_D$

Please note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.com/abpromise or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors