# abcam

# Product datasheet

# Anti-Mesothelin antibody [EPR19025-42] - BSA and Azide free ab227810



# 5 Images

#### Overview

**Product name** Anti-Mesothelin antibody [EPR19025-42] - BSA and Azide free

**Description** Rabbit monoclonal [EPR19025-42] to Mesothelin - BSA and Azide free

**Host species** Rahhit

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

**Species reactivity** Reacts with: Human

**Immunogen** Recombinant fragment within Human Mesothelin aa 250 to the C-terminus. The exact sequence is

proprietary.

Database link: Q13421

Positive control IHC-P: Human mesothelioma tissue.

**General notes** Ab227810 is the carrier-free version of ab196235. This format is designed for use in antibody

labeling, including fluorochromes, metal isotopes, oligonucleotides, enzymes.

Our carrier-free formats are supplied in a buffer free of BSA, sodium azide and glycerol for higher conjugation efficiency.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

ab227810 is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm.

Maxpar® is a trademark of Fluidigm Canada Inc.

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<sup>®</sup> patents.

Reproducibility is key to advancing scientific discovery and accelerating scientists' next

breakthrough.

Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.

We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ quarantee.

In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.

We are also updating the applications & species that this product has been "predicted to work with," however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, as well as customer reviews and Q&As.

#### **Properties**

Form Liquid

**Storage instructions** Shipped at 4°C. Store at +4°C. Do Not Freeze.

Storage buffer pH: 7.2

Constituent: PBS

Carrier free Yes

Purity Protein A purified

ClonalityMonoclonalClone numberEPR19025-42

**Isotype** IgG

#### **Applications**

Our Abpromise guarantee covers the use of ab227810 in the following tested applications.

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

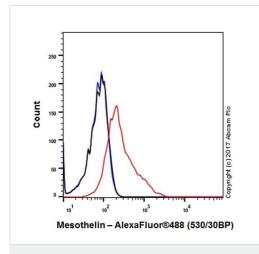
Application	Abreviews	Notes
WB		Use at an assay dependent concentration. Detects a band of approximately 40, 69 kDa (predicted molecular weight: 69 kDa).
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
Flow Cyt		Use at an assay dependent concentration.

Application	Abreviews	Notes
IP		Use at an assay dependent concentration.

### **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.

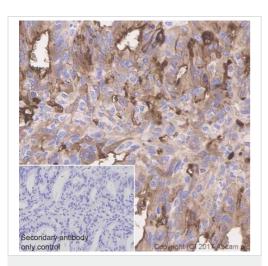
#### **Images**



Flow Cytometry - Anti-Mesothelin antibody [EPR19025-42] - BSA and Azide free (ab227810) Flow cytometric analysis of HeLa (human epithelial cell line from cervix adenocarcinoma) cell line labeling Mesothelin with ab196235 at 1/50 dilution (red) compared with a Rabbit lgG, monoclonal [EPR25A] - Isotype Control (ab172730) (black) and an unlabeled control (cells without incubation with primary antibody and secondary antibody) (blue). Goat Anti-Rabbit lgG H&L (Alexa Fluor® 488) (ab150077) at 1/2000 dilution was used as the secondary antibody.

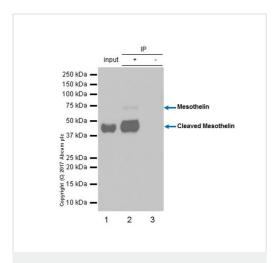
Total viable cells were gated for the image.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab196235).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Mesothelin antibody

[EPR19025-42] - BSA and Azide free (ab227810)



Immunoprecipitation - Anti-Mesothelin antibody [EPR19025-42] - BSA and Azide free (ab227810)

Immunohistochemical analysis of paraffin-embedded human ovarian adenocarcinoma tissue labeling Mesothelin with ab196235 at 1/1500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Cytoplasmic staining on tumor cells of human ovarian adenocarcinoma (PMID: 17945478). Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (HRP) Ready to use.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab196235).

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Mesothelin was immunoprecipitated from 0.35 mg of HeLa (human epithelial cell line from cervix adenocarcinoma) lysate with ab196235 at 1/30 dilution. Western blot was performed from the immunoprecipitate using ab196235 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (ab131366), was used for detection at 1/10000 dilution.

Lane 1: HeLa whole cell lysate 10 µg (Input).

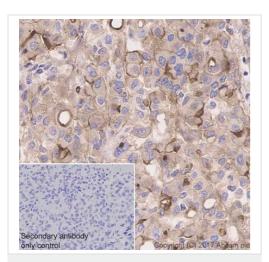
Lane 2: ab196235 IP in HeLa whole cell lysate.

**Lane 3:** Rabbit monoclonal lgG (ab172730) instead of ab196235 in HeLa whole cell lysate.

Exposure time: 3 minutes.

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab196235).



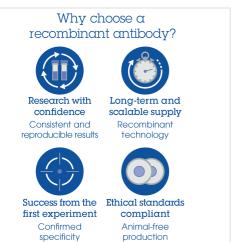
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Mesothelin antibody
[EPR19025-42] - BSA and Azide free (ab227810)

Immunohistochemical analysis of paraffin-embedded human mesothelioma tissue labeling Mesothelin with ab196235 at 1/1500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Membranous and cytoplasmic staining on human mesothelioma (PMID: 17945478). Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (HRP) Ready to use.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab196235).

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Anti-Mesothelin antibody [EPR19025-42] - BSA and Azide free (ab227810)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

#### 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