abcam

ab227810

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

Recombinant | RabMAb

## Key facts

| | |
|---|---|
| **Isotype** | IgG |
| **Host species** | Rabbit |
| **Storage buffer** | pH: 7.2 - 7.4 Constituents: PBS |
| **Form** | Liquid |
| **Clonality** | Monoclonal |
| **Immunogen** | The exact immunogen used to generate this antibody is proprietary information. |
| **Carrier free** | Yes |
| **Clone number** | EPR19025-42 |
| **Purification technique** | Affinity purification Protein A |
| **Concentration** | 1.029 mg/mL The concentration of this product may be batch-dependent<br>Batch concentration finder → |

## Reactivity data

## IP

### Tested

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | - |

| | |
|---|---|
| **Notes** | - |

## Flow Cyt

**Tested**

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | - |
| **Notes** | - |

## WB

**Tested**

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | - |
| **Notes** | - |

## IHC-P

**Tested**

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | - |
| **Notes** | - |

# Target data

See full target information MSLN

| | |
|---|---|
| **Function** | Membrane-anchored forms may play a role in cellular adhesion. Megakaryocyte-potentiating factor (MPF) potentiates megakaryocyte colony formation in vitro. |

# Storage

| | |
|---|---|
| **Shipped at conditions** | Blue Ice |
| **Appropriate short-term storage conditions** | +4°C |

| | |
|---|---|
| **Appropriate long-term storage conditions** | +4°C |
| **Storage information** | Do Not Freeze |

## Notes

ab227810 is the carrier-free version of ab196235.

**Patented technology**

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

**What are the advantages of a recombinant monoclonal antibody?**

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 batch production

For more information, read more on recombinant antibodies.

**Conjugation ready**

Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

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.

**Compatibility**

This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc.

## Product promise

**Tested**

We have tested this species and application combination and it works. It is covered by our product promise.

**Expected**

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

**Predicted**

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

**Not recommended**

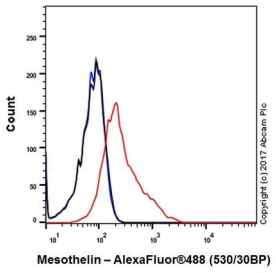
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

## 6 product images

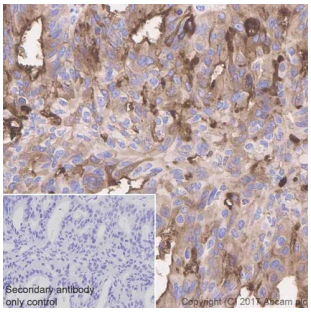



### Flow Cytometry - Anti-Mesothelin antibody [EPR19025-42] - BSA and Azide free (ab227810)

Mesothelin Flow Cytometry staining using rabbit Anti-Mesothelin antibody

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 IgG, monoclonal [EPR25A] - Isotype Control (ab172730) (black) and an unlabeled control (cells without incubation with primary antibody and secondary antibody) (blue). Goat Anti-Rabbit IgG 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).



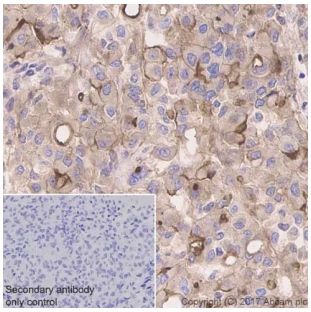

### Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Mesothelin antibody [EPR19025-42] - BSA and Azide free (ab227810)

Mesothelin Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Mesothelin antibody

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 IgG 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.



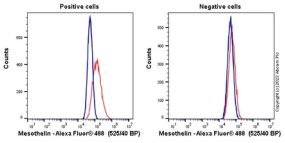

## Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Mesothelin antibody [EPR19025-42] - BSA and Azide free (ab227810)

Mesothelin Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Mesothelin antibody

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 IgG 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.




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

Mesothelin Flow Cytometry staining using rabbit Anti-Mesothelin antibody

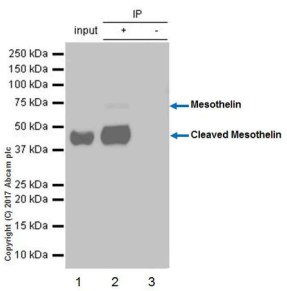
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab196235).

Flow cytometry overlay histogram showing left HeLa positive cells and right negative PC3 stained with ab196235 (red line). The cells were incubated in 1x PBS containing 10% normal goat serum to block non-specific protein-protein interactionfollowed by the antibody (ab196235) (1x 106 in 100µl at 5.0 µg/ml (1/410)) for 30min on ice.

The secondary antibody Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed was incubated at 1/4000 for 30min on ice

Isotype control antibody (black line) was Recombinant Rabbit IgG, monoclonal [EPR25A] - Isotype Control used at the same concentration and conditions as the primary antibody. Unlabelled sample (blue line) was also used as a control.

Acquisition of >5000 events were collected using a 50 mW Blue laser (488nm) and 525/40 bandpass filter.




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

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 IgG (ab172730) instead of ab196235 in HeLa whole cell lysate.

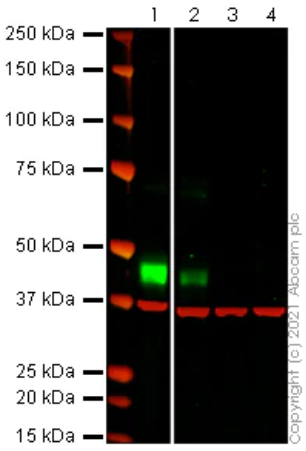
**Exposure time:** 3 minutes.

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).
All lanes:
Immunoprecipitation - Anti-Mesothelin antibody [EPR19025-42] (ab196235)

Predicted band size: 69 kDa

Observed band size: 40 kDa, 69 kDa




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

Mesothelin Western blot staining using rabbit Anti-Mesothelin antibody

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab196235).
False colour image of Western blot: Anti-Mesothelin antibody [EPR19025-42] 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, ab196235 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.

All lanes:
Western blot - Anti-Mesothelin antibody [EPR19025-42] (ab196235) at 1/1000 dilution

Lane 1:
OVCAR-3 cell lysate at 20 µg

Lane 2:
HeLa cell lysate at 20 µg

Lane 3:
A549 cell lysate at 20 µg

Lane 4:
PC-3 cell lysate at 20 µg

Performed under reducing conditions.

Predicted band size: 69 kDa

Observed band size: 45 kDa

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.