abcam

ab180174

Anti-SEMA3D antibody [EPR13458(B)] - C-terminal

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR13458(B)
Purification technique	Affinity purification Protein A
Concentration	0.075 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IP

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	1/1000 - 1/5000
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

IHC-P

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

ICC/IF

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/10 - 1/100
Notes	ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

Target data

See full target information SEMA3D

Function	Induces the collapse and paralysis of neuronal growth cones. Could potentially act as repulsive cues toward specific neuronal populations. Binds to neuropilin (By similarity).

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

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.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	SEMA3D also known as Semaphorin 3D is a member of the semaphorin protein family. It has a mass of approximately 87 kDa. SEMA3D acts as a signaling protein that plays a role in guiding neuronal and non-neuronal cell processes. It functions by binding to neuropilin and plexin receptors to regulate cell movement and positioning. Expression of SEMA3D occurs in various tissues with significant presence in the nervous system lungs and kidneys.
Biological function summary	SEMA3D influences axonal guidance angiogenesis and immune response. It participates as part of a complex with its receptors regulating signaling pathways that are important for nervous system development and vascular patterning. By altering cellular processes SEMA3D can impact how cells grow connect and interact within their environment affecting tissue morphogenesis and repair.
Pathways	SEMA3D interacts with the semaphorin signaling pathway and the VEGF (vascular endothelial growth factor) pathway. These pathways are essential for processes such as axon guidance and blood vessel formation. SEMA3D works closely with proteins like Plexin-A1 and Neuropilin-1 orchestrating cellular responses necessary for vascular and neural network development.
Associated diseases and disorders	SEMA3D has connections to cancer progression and pulmonary diseases. Altered expression of SEMA3D can influence tumor growth and metastasis with changes in related proteins such as Neuropilin-1 affecting these processes. In pulmonary disorders SEMA3D expression levels can impact lung development and function linking to conditions like pulmonary fibrosis where the dysregulation of this protein and its receptor Plexin-A1 might play a role.

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

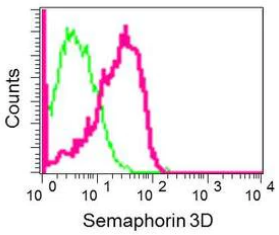
We do not recommend this combination. It is not covered by our product promise.

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.

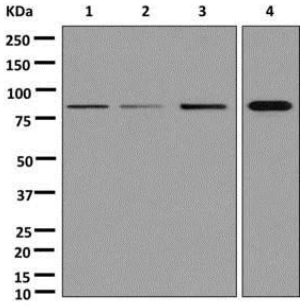
2 product images



Flow Cytometry (Intracellular) - Anti-SEMA3D antibody [EPR13458(B)] - C-terminal (ab180174)

SEMA3D Flow Cytometry (Intracellular) staining using rabbit Anti-SEMA3D antibody

Intracellular flow cytometric analysis of permeabilized MCF7 cells labeling SEMA3D using ab180174 at 1/10 (red) or a rabbit IgG (negative) (green).



Western blot - Anti-SEMA3D antibody [EPR13458(B)] - C-terminal (ab180174)

All lanes:
Western blot - Anti-SEMA3D antibody [EPR13458(B)] - C-terminal (ab180174) at 1/1000 dilution

Lane 1:
293T cell lysate at 10 µg

Lane 2:
Fetal brain lysate at 10 µg

Lane 3:
MCF7 cell lysate at 10 µg

Lane 4:
Fetal heart lysate at 10 µg

Secondary

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

Developed using the ECL technique.

Predicted band size: 90 kDa

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