abcam

ab250454

Anti-TMEM256 antibody [EPR12842] - 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	EPR12842
Purification technique	Affinity purification
Concentration	1.009 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IP

Tested

Species	Human
Dilution info	-

Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	-
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

Target data

See full target information TMEM256

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

ab250454 is the carrier-free version of ab181239.

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.

Supplementary info

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

Activity summary	TMEM256 also known as Transmembrane Protein 256 is an integral membrane protein with a mass of approximately 18 kDa. It localizes to the cell membrane where it spans the lipid bilayer with multiple transmembrane domains. Expression of TMEM256 is noted in several tissues with higher expression observed in the brain and testis. This suggests a role linked to specific tissue functions possibly related to signaling processes or transport mechanisms across the membrane.
Biological function summary	TMEM256 appears significant in modulating membrane potential and maintaining homeostasis. Though not part of a well-defined complex the protein's characteristics suggest involvement in maintaining cellular ion gradients. This may implicate TMEM256 in key cellular activities such as neuron signaling or other electrically excitable tissue functions. Its role suggests interactions with other membrane proteins which could further modulate its activity or be involved in cellular responses to the external environment.
Pathways	TMEM256 influences cellular signaling and membrane transport mechanisms. It is implicated in ion transport pathways and may interact with proteins like sodium-potassium pumps contributing to maintaining membrane potential. Additionally TMEM256 likely plays a role in neural communication pathways potentially interacting with proteins essential in synaptic function such as neurotransmitter receptors or ion channels suggesting coordination in neuron signaling and rapid response systems.
Associated diseases and disorders	TMEM256 has links to neurological conditions and reproductive health issues. Aberrant expression or mutations in TMEM256 may connect to neurological disorders potentially through its role in modulating ion gradients and neuron excitability. Another aspect is the possible involvement in reproductive disorders due to its expression patterns in testis. The protein could interact with other disease-related proteins such as ion channels or transporters which are known to be associated with both neurological and reproductive health.

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

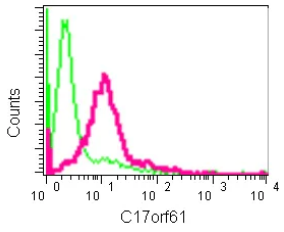
We do not recommend this combination. It is not covered by our product promise.

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.

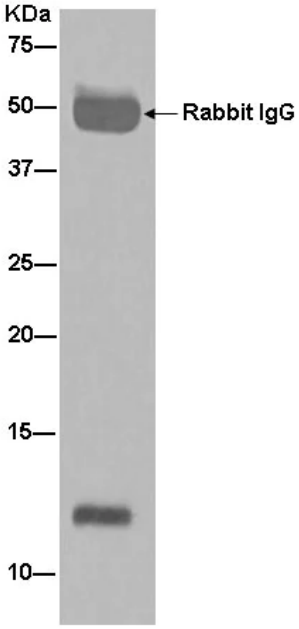
4 product images



Flow Cytometry (Intracellular) - Anti-TMEM256 antibody [EPR12842] - BSA and Azide free (ab250454)

TMEM256 Flow Cytometry (Intracellular) staining using rabbit Anti-TMEM256 antibody

This data was developed using ab181239, the same antibody clone in a different buffer formulation.
Intracellular flow cytometric analysis of A549 cells (paraformaldehyde-fixed, 2%) labeling TMEM256 with ab181239 at 1/200 dilution (red) or a rabbit IgG (negative) (green), followed by Goat anti rabbit IgG (FITC) secondary at 1/150 dilution.

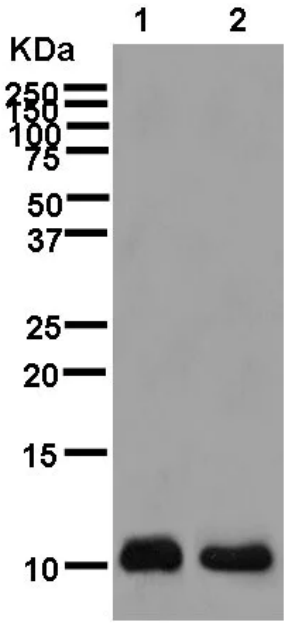


Immunoprecipitation - Anti-TMEM256 antibody [EPR12842] - BSA and Azide free (ab250454)

This data was developed using ab181239, the same antibody clone in a different buffer formulation.
Western blot analysis of immunoprecipitation pellet from A549 cell lysate immunoprecipitated using ab181239 at 1/50 dilution.
Secondary: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution.

All lanes:
Immunoprecipitation - Anti-TMEM256 antibody [EPR12842] (ab181239)

Predicted band size: 12 kDa



Western blot - Anti-TMEM256 antibody [EPR12842] - BSA and Azide free (ab250454)

TMEM256 Western blot staining using rabbit Anti-TMEM256 antibody

This data was developed using ab181239, the same antibody clone in a different buffer formulation.
All lanes:
Western blot - Anti-TMEM256 antibody [EPR12842] (ab181239) at 1/2000 dilution

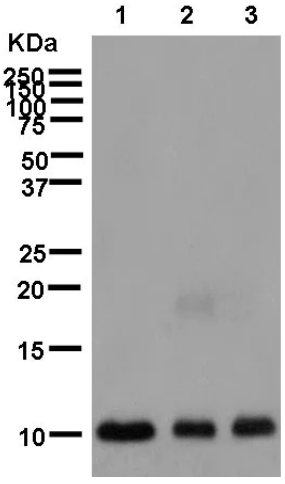
Lane 1:
Human fetal liver lysate at 20 µg

Lane 2:
Human fetal kidney lysate at 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab136636) at 1/500 dilution

Predicted band size: 12 kDa



Western blot - Anti-TMEM256 antibody [EPR12842] - BSA and Azide free (ab250454)

This data was developed using ab181239, the same antibody clone in a different buffer formulation.
All lanes:
Western blot - Anti-TMEM256 antibody [EPR12842] (ab181239) at 1/10000 dilution

Lane 1:
A549 cell lysate at 20 µg

Lane 2:
Y79 cell lysate at 20 µg

Lane 3:
LnCaP cell lysate at 20 µg

Secondary

All lanes:
Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 12 kDa

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