abcam

ab180138

Anti-AP3M2 antibody [EPR12965] - N-terminal

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	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	EPR12965
Purity	Tissue culture supernatant

Reactivity data

WB

Tested

Species	Human
Dilution info	1/5000 - 1/10000
Notes	-

Predicted

Species	Mouse, Rat

Dilution info	-
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/500
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/30
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 AP3M2

Function	Part of the AP-3 complex, an adaptor-related complex which is not clathrin-associated. The complex is associated with the Golgi region as well as more

peripheral structures. It facilitates the budding of vesicles from the Golgi membrane and may be directly involved in trafficking to lysosomes. In concert with the BLOC-1 complex, AP-3 is required to target cargos into vesicles assembled at cell bodies for delivery into neurites and nerve terminals.

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	AP3M2 also known as Adapter-Related Protein Complex 3 Mu 2 Subunit is a protein that plays a critical role in intracellular trafficking processes. It has a molecular mass of approximately 50 kDa. This protein is expressed in various tissues and is significantly abundant in the nervous system. AP3M2 forms part of the AP-3 complex which is essential for protein sorting and transport from the trans-Golgi network to endosomes and lysosomes.

Biological function summary	AP3M2 contributes to the regulation of membrane protein localization. It acts as part of the AP-3 complex working together with other subunits to facilitate vesicle formation and cargo selection for transport. The AP-3 complex is an adaptor protein complex that functions in the clathrin-independent transport pathway important for lysosomal protein sorting. AP3M2's function ensures proper cellular compartmentalization and distribution of lysosomal enzymes and membrane proteins.
Pathways	AP3M2 functions in the context of both the endocytic and secretory pathways. Within these pathways the protein partakes alongside proteins like VPS41 and HPS1 contributing to vesicular trafficking and organelle biogenesis. In the endocytic pathway AP3M2 helps in the transport of cargo to lysosomes affecting protein degradation and recycling while in the secretory pathway it assists in packaging lysosomal proteins for delivery to their proper cellular destinations.
Associated diseases and disorders	AP3M2 is linked to Hermansky-Pudlak syndrome and neurodevelopmental disorders. Mutations in the genes encoding proteins of the AP-3 complex including AP3M2 are known to disrupt normal vesicular trafficking leading to symptoms observed in Hermansky-Pudlak syndrome a disorder characterized by albinism and bleeding issues. Furthermore alterations in AP3M2 function are also associated with neurological disorders linking to proteins like BI1 and AP3B1 affecting neuronal migration and synaptic function.

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

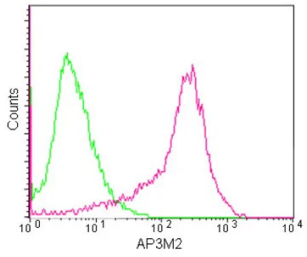
We do not recommend this combination. It is not covered by our product promise.

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.

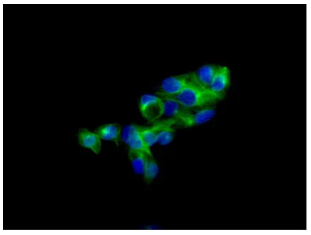
4 product images



Flow Cytometry (Intracellular) - Anti-AP3M2 antibody [EPR12965] - N-terminal (ab180138)

AP3M2 Flow Cytometry (Intracellular) staining using rabbit Anti-AP3M2 antibody

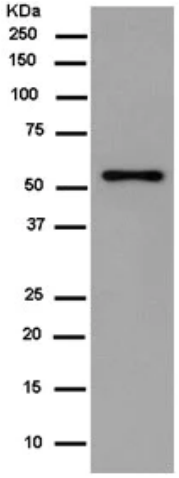
Intracellular flow cytometric analysis of 2% paraformaldehyde fixed U87-MG cells labeling AP3M2 with ab180138 at 1/30 dilution. Secondary antibody Goat anti rabbit IgG (FITC) at 1/75 dilution. Isotype control Rabbit IgG.



Immunocytochemistry/ Immunofluorescence - Anti-AP3M2 antibody [EPR12965] - N-terminal (ab180138)

AP3M2 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-AP3M2 antibody

Immunofluorescent analysis of 4% paraformaldehyde-fixed HepG2 cells labeling AP3M2 with ab180138 at 1/500 dilution. Secondary antibody Goat anti rabbit IgG (Dylight 488) at 1/250 dilution. Conterstained with Dapi blue.



Western blot - Anti-AP3M2 antibody [EPR12965] - N-terminal (ab180138)

AP3M2 Western blot staining of U87-MG using rabbit Anti-AP3M2 antibody

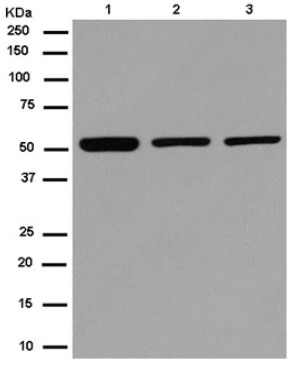
All lanes:
Western blot - Anti-AP3M2 antibody [EPR12965] - N-terminal (ab180138) at 1/5000 dilution

All lanes:
U87-MG at 20 µg

Secondary

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

Predicted band size: 47 kDa



Western blot - Anti-AP3M2 antibody [EPR12965] - N-terminal (ab180138)

AP3M2 Western blot staining using rabbit Anti-AP3M2 antibody

All lanes:
Western blot - Anti-AP3M2 antibody [EPR12965] - N-terminal (ab180138) at 1/20000 dilution

Lane 1:
Human fetal brain tissue lysate at 20 µg

Lane 2:
HepG2 cell Lysate at 20 µg

Lane 3:
SH-SY5Y cell Lysate at 20 µg

Secondary

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

Predicted band size: 47 kDa

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