abcam

**ab182000**

# Anti-AP3M2 antibody [EPR12966]

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** | EPR12966 |
| **Purification technique** | Affinity purification Protein A |
| **Concentration** | 0.271 mg/mL The concentration of this product may be batch-dependent<br>Batch concentration finder → |

## Reactivity data

### WB

#### Tested

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | 1/1000 - 1/10000 |
| **Notes** | - |

#### Predicted

| | |
|---|---|
| **Species** | Mouse, Rat |
| **Dilution info** | - |
| **Notes** | - |

## Flow Cyt (Intra)

### Tested

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | 1/50 |
| **Notes** | ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody. |

### Predicted

| | |
|---|---|
| **Species** | Mouse, Rat |
| **Dilution info** | - |
| **Notes** | - |

## IHC-P

### Tested

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | 1/50 - 1/100 |
| **Notes** | - |

### 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.

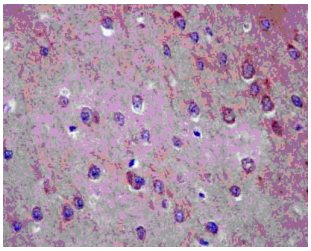
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We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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.

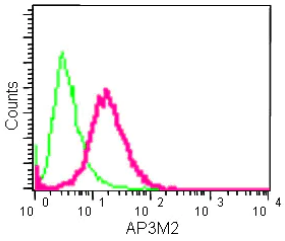
## 3 product images



### Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-AP3M2 antibody [EPR12966] (ab182000)

AP3M2 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-AP3M2 antibody

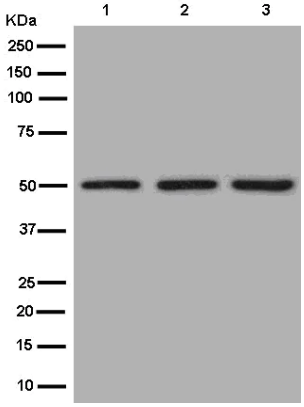
Immunohistochemical analysis of paraffin-embedded Human brain tissue labeling AP3M2 with ab182000 at 1/50 dilution followed by pre-diluted HRP-conjugated secondary antibody and counter-stained with Hematoxylin.
Perform heat mediated antigen retrieval with EDTA buffer pH 9 before commencing with IHC staining protocol.




### Flow Cytometry (Intracellular) - Anti-AP3M2 antibody [EPR12966] (ab182000)

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

Intracellular flow cytometric analysis of SH-SY5Ycells (paraformaldehyde-fixed, 2%) labeling AP3M2 with ab182000 at 1/50 dilution (red) or a rabbit IgG (negative) (green), followed by secondary Goat anti rabbit IgG (FITC) at 1/150 dilution.




### Western blot - Anti-AP3M2 antibody [EPR12966] (ab182000)

All lanes:
Western blot - Anti-AP3M2 antibody [EPR12966] (ab182000) at 1/10000 dilution

Lane 1:
HepG2 cell lysate at 20 µg

Lane 2:
U87-MG cell lysate at 20 µg

Lane 3:
SH-SY5Y cell lysate at 20 µg

Secondary

All lanes:
Goat Anti-Rabbit IgG, (H+L)-HRP 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'.