abcam

Product datasheet

Anti-AP2M1 antibody [EP2695Y] ab75995

Recombinant RabMAb

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Overview

Product name	Anti-AP2M1 antibody [EP2695Y]
Description	Rabbit monoclonal [EP2695Y] to AP2M1
Host species	Rabbit
Tested applications	**Suitable for:** WB
Species reactivity	**Reacts with:** Mouse, Rat, Human
Immunogen	Synthetic peptide within Human AP2M1 aa 350 to the C-terminus (C terminal). The exact sequence is proprietary. Database link: **Q96CW1**
Positive control	WB: MCF-7, HeLa and SKBR-3 cell lysates
General notes	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 production For more information **see here**. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol, 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EP2695Y

Isotype IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab75995 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	★☆☆☆☆ **(1)**	1/10000. Predicted molecular weight: 50 kDa. **For unpurified use at 1/1000 - 1/5000.**

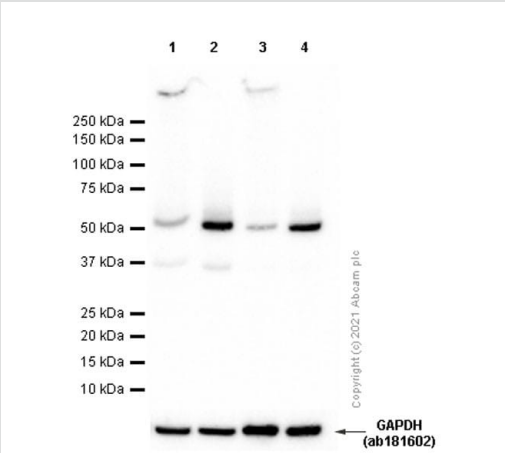
Target

Function Component of the adaptor protein complex 2 (AP-2). Adaptor protein complexes function in protein transport via transport vesicles in different membrane traffic pathways. Adaptor protein complexes are vesicle coat components and appear to be involved in cargo selection and vesicle formation. AP-2 is involved in clathrin-dependent endocytosis in which cargo proteins are incorporated into vesicles surrrounded by clathrin (clathrin-coated vesicles, CCVs) which are destined for fusion with the early endosome. The clathrin lattice serves as a mechanical scaffold but is itself unable to bind directly to membrane components. Clathrin-associated adaptor protein (AP) complexes which can bind directly to both the clathrin lattice and to the lipid and protein components of membranes are considered to be the major clathrin adaptors contributing the CCV formation. AP-2 also serves as a cargo receptor to selectively sort the membrane proteins involved in receptor-mediated endocytosis. AP-2 seems to play a role in the recycling of synaptic vesicle membranes from the presynaptic surface. AP-2 recognizes Y-X-X-[FILMV] (Y-X-X-Phi) and [ED]-X-X-X-L-[LI] endocytosis signal motifs within the cytosolic tails of transmembrane cargo molecules. AP-2 may also play a role in maintaining normal post-endocytic trafficking through the ARF6-regulated, non-clathrin pathway. The AP-2 mu subunit binds to transmembrane cargo proteins; it recognizes the Y-X-X-Phi motifs. The surface region interacting with to the Y-X-X-Phi motif is inaccessible in cytosolic AP-2, but becomes accessible through a conformational change following phosphorylation of AP-2 mu subunit at 'Tyr-156' in membrane-associated AP-2. The membrane-specific phosphorylation event appears to involve assembled clathrin which activates the AP-2 mu kinase AAK1 (By similarity). Plays a role in endocytosis of frizzled family members upon Wnt signaling.

Sequence similarities Belongs to the adaptor complexes medium subunit family.
Contains 1 MHD (mu homology) domain.

Cellular localization Cell membrane. Membrane > coated pit. AP-2 appears to be excluded from internalizing CCVs and to disengage from sites of endocytosis seconds before internalization of the nascent CCV.

Images



Western blot - Anti-AP2M1 antibody [EP2695Y] (ab75995)

All lanes : Anti-AP2M1 antibody [EP2695Y] (ab75995) at 1/1000 dilution

Lane 1 : MCF7 (Human breast adenocarcinoma epithelial cell) whole cell lysate boiled
Lane 2 : MCF7 (Human breast adenocarcinoma epithelial cell) whole cell lysate unboiled
Lane 3 : HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate boiled
Lane 4 : HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate unboiled

Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/10000 dilution

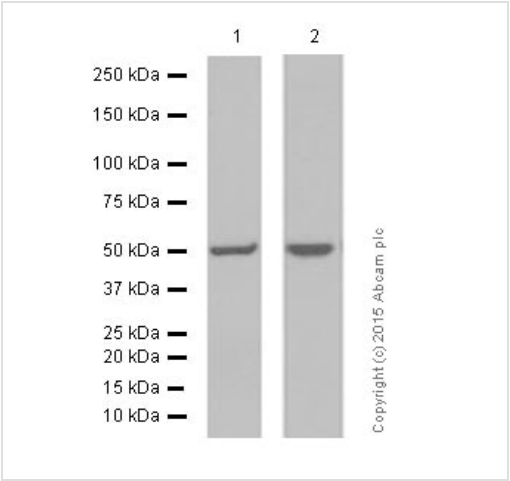
Predicted band size: 50 kDa

Exposure time: 7 seconds

We recommend not to boil the samples after lysis to get desired WB results.

Blocking buffer and concentration: 5% NFDM/TBST

Diluting buffer and concentration: 5% NFDM/TBST



Western blot - Anti-AP2M1 antibody [EP2695Y] (ab75995)

All lanes : Anti-AP2M1 antibody [EP2695Y] (ab75995) at 1/10000 dilution (purified)

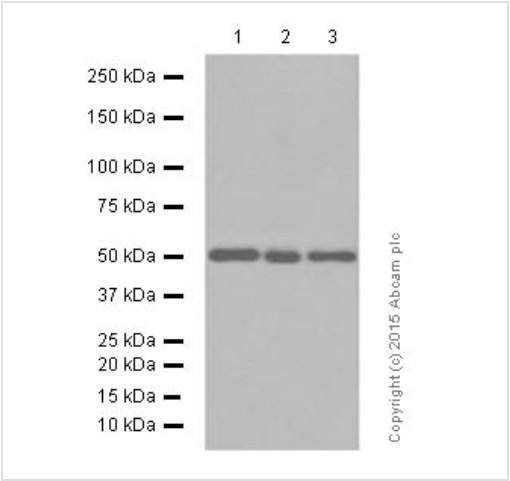
Lane 1 : Rat brain tissue lysate
Lane 2 : Mouse brain tissue lysate

Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/10000 dilution

Predicted band size: 50 kDa

Blocking buffer and concentration: 5% NFDM/TBST.
Diluting buffer and concentration: 5% NFDM /TBST.



Western blot - Anti-AP2M1 antibody [EP2695Y] (ab75995)

All lanes : Anti-AP2M1 antibody [EP2695Y] (ab75995) at 1/10000 dilution (purified)

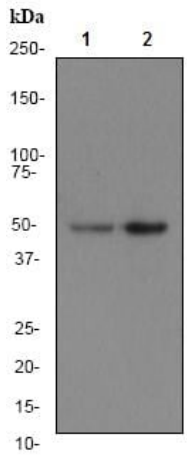
Lane 1 : HEK293 cell lysate
Lane 2 : SKBR-3 cell lysate
Lane 3 : MCF-7 cell lysate

Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/10000 dilution

Predicted band size: 50 kDa

Blocking buffer and concentration: 5% NFDM/TBST.
Diluting buffer and concentration: 5% NFDM /TBST.



Western blot - Anti-AP2M1 antibody [EP2695Y] (ab75995)

All lanes : Anti-AP2M1 antibody [EP2695Y] (ab75995) at 1/1000 dilution (unpurified)

Lane 1 : MCF-7 cell lysate
Lane 2 : SKBR-3 cell lysate

Lysates/proteins at 10 µg per lane.

Secondary
All lanes : HRP labelled goat anti rabbit at 1/2000 dilution

Predicted band size: 50 kDa
Observed band size: 50 kDa

Anti-AP2M1 antibody [EP2695Y] (ab75995)

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