abcam

Product datasheet

Anti-AP2M1 antibody ab106542

4 References 1 Image

Overview

Product name Anti-AP2M1 antibody

Description Chicken polyclonal to AP2M1

Host species Chicken

Tested applications Suitable for: ICC/IF, WB, IHC-P

Species reactivity Reacts with: Human

Immunogen 16 amino acid peptide near the carboxy terminus of Human AP2M1 (NP_004059).

Positive control Human kidney tissue lysate;

General notes

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at 4°C (stable for up to 12 months).

Storage buffer pH: 7.2

Preservative: 0.02% Sodium azide

Constituent: PBS

Purity Immunogen affinity purified

Clonality Polyclonal

Isotype IgY

Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab106542 in the following tested applications.

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

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Application	Abreviews	Notes
ICC/IF		Use a concentration of 20 µg/ml.
WB		Use a concentration of 1 - 2 μg/ml. Predicted molecular weight: 50 kDa.
IHC-P		Use a concentration of 2.5 µg/ml.

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-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

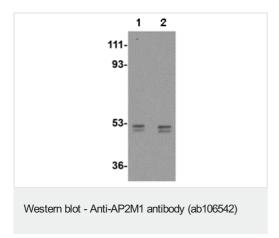
Belongs to the adaptor complexes medium subunit family.

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



Lane 1: Anti-AP2M1 antibody (ab106542) at 1 µg/ml

Lane 2: Anti-AP2M1 antibody (ab106542) at 2 µg/ml

All lanes: Human kidney tissue lysate

Lysates/proteins at 15 µg per lane.

Predicted band size: 50 kDa

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