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Anti-AP50 / AP2M1 Antibody (N-Terminus)

Rabbit Anti Human Polyclonal Antibody
Catalog # ALS17450

Specification

Anti-AP50 / AP2M1 Antibody (N-Terminus) - Product Information

Application	**WB, IHC-P, E**
Primary Accession	Q96CW1
Predicted	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**49655**

Anti-AP50 / AP2M1 Antibody (N-Terminus) - Additional Information

Gene ID 1173

Alias Symbol	**AP2M1**

Other Names
AP2M1, Adaptin-mu2, AP-2 complex subunit mu, AP-2 mu 2 chain, AP-2 mu chain, AP50, CLAPM1, Mu2, KIAA0109, HA2 50 kDa subunit

Target/Specificity
Endogenous levels of human AP2M1 protein. Sequence homology predicts that it will also react with mouse and rat AP2M1 proteins.

Reconstitution & Storage
Lyophilized from PBS, pH 7.4, 0.02% sodium azide. Store lyophilized at -20°C. The reconstituted product can be stored for short term at 4 °C or long term at -20 °C or below. Avoid freeze/thaw cycles.

Precautions
Anti-AP50 / AP2M1 Antibody (N-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

Anti-AP50 / AP2M1 Antibody (N-Terminus) - Protein Information

Name AP2M1 (HGNC:564)

Synonyms CLAPM1, KIAA0109

Function
Component of the adaptor protein complex 2 (AP-2) (PubMed:12694563, PubMed:12952941, PubMed:14745134, PubMed:14985334, PubMed:15473838, PubMed:<a

href="http://www.uniprot.org/citations/31104773" target="_blank">31104773). Adaptor protein complexes function in protein transport via transport vesicles in different membrane traffic pathways (PubMed:12694563, PubMed:12952941, PubMed:14745134, PubMed:14985334, PubMed:15473838, PubMed:31104773). Adaptor protein complexes are vesicle coat components and appear to be involved in cargo selection and vesicle formation (PubMed:12694563, PubMed:12952941, PubMed:14745134, PubMed:14985334, PubMed:15473838, PubMed:31104773). AP-2 is involved in clathrin-dependent endocytosis in which cargo proteins are incorporated into vesicles surrounded by clathrin (clathrin-coated vesicles, CCVs) which are destined for fusion with the early endosome (PubMed:12694563, PubMed:12952941, PubMed:14745134, PubMed:14985334, PubMed:15473838, PubMed:31104773). The clathrin lattice serves as a mechanical scaffold but is itself unable to bind directly to membrane components (PubMed:12694563, PubMed:12952941, PubMed:14745134, PubMed:14985334, PubMed:15473838, PubMed:31104773). 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 (PubMed:12694563, PubMed:12952941, PubMed:14745134, PubMed:14985334, PubMed:15473838, PubMed:31104773). AP-2 also serves as a cargo receptor to selectively sort the membrane proteins involved in receptor-mediated endocytosis (PubMed:16581796). AP-2 seems to play a role in the recycling of synaptic vesicle membranes from the presynaptic surface (PubMed:12694563, PubMed:12952941, PubMed:14745134, PubMed:14985334, PubMed:15473838, PubMed:31104773). 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 (By similarity). AP-2 may also play a role in maintaining normal post-endocytic trafficking through the ARF6-regulated, non-clathrin pathway (PubMed:19033387). During long-term potentiation in hippocampal neurons, AP-2 is responsible for the endocytosis of ADAM10 (PubMed:<a href="http://www.uniprot.org/citations/23676497"

target="_blank">23676497). The AP-2 mu subunit binds to transmembrane cargo proteins; it recognizes the Y- X-X-Phi motifs (By similarity). 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 Thr-156 in membrane-associated AP-2 (PubMed:11877457). The membrane-specific phosphorylation event appears to involve assembled clathrin which activates the AP-2 mu kinase AAK1 (PubMed:11877457). Plays a role in endocytosis of frizzled family members upon Wnt signaling (By similarity).

Cellular Location
Cell membrane. Membrane, coated pit; Peripheral membrane protein; Cytoplasmic side. Note=AP-2 appears to be excluded from internalizing CCVs and to disengage from sites of endocytosis seconds before internalization of the nascent CCV {ECO:0000250|UniProtKB:P84091}

Tissue Location
Expressed in the brain (at protein level).

Anti-AP50 / AP2M1 Antibody (N-Terminus) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-AP50 / AP2M1 Antibody (N-Terminus) - Images