

Anti-AP2M1 antibody



Description	Unconjugated Rabbit polyclonal to AP2M1
Model	STJ190156
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	ELISA, WB
Immunogen	Synthesized peptide derived from human AP2M1 protein.
Immunogen Region	100-180aa
Gene ID	1173
Gene Symbol	AP2M1
Dilution range	WB 1:500-2000 ELISA 1:5000-20000
Specificity	AP2M1 Polyclonal Antibody detects endogenous levels of protein.
Purification	AP2M1 antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	AP-2 complex subunit mu AP-2 mu chain Adaptin-mu2 Adaptor protein complex AP-2 subunit mu Adaptor-related protein complex 2 subunit mu Clathrin assembly protein complex 2 mu medium chain Clathrin coat assembly protein A
Molecular Weight	47 kDa
Clonality	Polyclonal

Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid form in PBS containing 50% glycerol, and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:564OMIM:601024
Alternative Names	AP-2 complex subunit mu AP-2 mu chain Adaptin-mu2 Adaptor protein complex AP-2 subunit mu Adaptor-related protein complex 2 subunit mu Clathrin assembly protein complex 2 mu medium chain Clathrin coat assembly protein A
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 surrounded 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 . Plays a role in endocytosis of frizzled family members upon Wnt signaling .
Cellular Localization	Cell membrane. Membrane, coated pit. Peripheral membrane protein. Cytoplasmic side. AP-2 appears to be excluded from internalizing CCVs and to disengage from sites of endocytosis seconds before internalization of the nascent CCV.