

Product datasheet for **TA383733**

AP2M1 Rabbit Monoclonal Antibody [Clone ID: R03-8C7]

Product data:

Product Type:	Primary Antibodies
Clone Name:	R03-8C7
Applications:	WB
Recommended Dilution:	WB: 1/1000
Reactivity:	Human
Host:	Rabbit
Isotype:	IgG
Clonality:	Monoclonal
Immunogen:	A synthetic phosphopeptide corresponding to residues surrounding Thr156 of human AP2M1 (Phosphorylated)
Formulation:	50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40% Glycerol, 0.01% Sodium azide and 0.05% BSA
Concentration:	lot specific
Purification:	Affinity Purified
Conjugation:	Unconjugated
Storage:	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Stability:	1 year
Predicted Protein Size:	Calculated MW: 50 kDa; Observed MW: 50 kDa
Gene Name:	adaptor related protein complex 2 mu 1 subunit
Database Link:	Entrez Gene 1173 Human Q96CW1



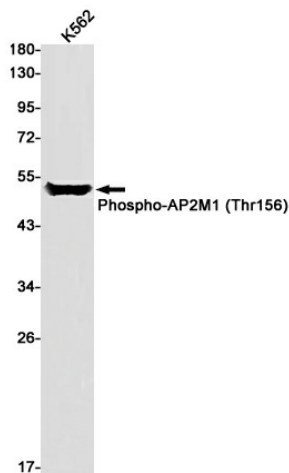
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Background:

Swiss-Prot Acc.Q96CW1.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 .

Synonyms:

Adaptin-mu2; AP50; CLAPM1; KIAA0109; mu2; OTTHUMP00000210697

Product images:

Western blot analysis of Phospho-AP2M1 (Thr156) in K562 lysates using Phospho-AP2M1 (Thr156) antibody.