

Recombinant Mouse Ap2s1 Protein, Myc/DDK-tagged

Cat. No. Ap2s1-1654M **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Purified recombinant protein of mouse full-length adaptor-related protein complex 2, sigma 1 subunit (Ap2s1), with C-terminal MYC/DDK tag, expressed in HEK293T cells.
Species	Mouse
Source	HEK293
Description	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 alpha and AP-2 sigma

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subunits are thought to contribute to the recognition of the [ED]-X-X-X-L-[LI] motif. May also play a role in extracellular calcium homeostasis.

Molecular Mass	15.9 kDa
Purity	> 80% as determined by SDS-PAGE and Coomassie blue staining
Stability	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
Storage	Store at -80 centigrade after receiving vials.
Concentration	>50 µg/mL as determined by microplate BCA method
Storage Buffer	25 mM Tris.HCl, pH 7.3, 100 mM glycine, 10% glycerol.

GENE INFORMATION

Gene Name	Ap2s1 adaptor-related protein complex 2, sigma 1 subunit [Mus musculus (house mouse)]
Official Symbol	Ap2s1
Synonyms	AP2S1; adaptor-related protein complex 2, sigma 1 subunit; AP-2 complex subunit sigma; sigma2-adaptin; sigma-adaptin 3b; clathrin coat assembly protein AP17; clathrin coat-associated protein AP17; clathrin assembly protein 2 small chain; adaptor protein complex AP-2 subunit sigma; plasma membrane adaptor AP-2 17 kDa protein; adapter-related protein complex 2 sigma subunit; AI043088; MGC62945
Gene ID	232910

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mRNA Refseq	NM_198613
Protein Refseq	NP_941015
UniProt ID	P62743

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