Recombinant AP2M1 protein (His tag)

Catalog Number	547925
Synonyms	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 AP50; Clathrin coat-associated protein AP50; HA2 50 kDa subunit; Plasma membrane adaptor AP-2 50 kDa protein
Species	Human
Expression System	E. coli
Accession	Q96CW1
Molecular Weight	Predictes a molecular mass of 51.31 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 51 kDa band.

Product Information

Sequence Region	1-435
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 1-435 aa (Q96CW1) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant AP-2 complex subunit mu (AP2M1) fragment (residues 1-435) from Homo sapiens, encompassing the complete MHD domain. This high-purity protein is an essential tool for investigating clathrin-mediated endocytosis, cargo recognition, and vesicle trafficking mechanisms in cellular research. AP-2 complex subunit mu is a critical component of the adaptor protein complex 2 (AP-2), which functions in clathrin-dependent endocytosis by mediating cargo selection and vesicle formation at the plasma membrane. The protein recognizes Y-X-X-[FILMV] endocytosis motifs in transmembrane cargo proteins and facilitates their incorporation into clathrin-coated vesicles destined for early endosomes. It localizes to coated pits on the cell membrane and plays additional roles in synaptic vesicle recycling, Wnt signaling pathways, and ADAM10 endocytosis during neuronal plasticity. The recombinant fragment (1-435) contains the full MHD domain responsible for cargo binding, making it ideal for structural and functional studies of endocytic machinery.