Recombinant AP1M2 protein (His tag)

Catalog Number	541658
Synonyms	AP-mu chain family member mu1B; Adaptor protein complex AP-1 subunit mu-2; Adaptor-related protein complex 1 subunit mu-2; Clathrin assembly protein complex 1 mu-2 medium chain 2; Golgi adaptor HA1/AP1 adaptin mu-2 subunit; Mu-adaptin 2; Mu1B-adaptin
Species	Human
Expression System	E. coli
Accession	Q9Y6Q5
Molecular Weight	Predictes a molecular mass of 49.77 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 50 kDa band.

Product Information

Sequence Region	1-423
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, 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 1-423 aa (Q9Y6Q5) 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-1 complex subunit mu-2 (AP1M2) fragment (residues 1-423) from Homo sapiens, encompassing the complete MHD domain. This high-purity protein is optimized for investigating clathrin-mediated vesicle trafficking, protein sorting mechanisms in the Golgi and endosomes, and domain-specific interactions in cellular transport pathways. AP-1 complex subunit mu-2 is a critical component of the adaptor protein complex 1 (AP-1), which facilitates clathrin recruitment to membranes and recognizes sorting signals in transmembrane cargo molecules. Functioning primarily in the trans-Golgi network (TGN) and endosomes, it enables protein sorting into coated vesicles for intracellular transport. The protein localizes to the Golgi apparatus and clathrin-coated vesicle membranes, where it acts as a peripheral membrane protein on the cytoplasmic side. The provided fragment (1-423) includes the essential MHD domain (168-421), which mediates key interactions in adaptor complex assembly and cargo recognition, making it invaluable for structural and functional studies of vesicular trafficking mechanisms.