Recombinant AP3B2 protein (His tag)

Catalog Number	544918
Synonyms	Adaptor protein complex AP-3 subunit beta-2; Adaptor-related protein complex 3 subunit beta-2; Beta-3B-adaptin; Clathrin assembly protein complex 3 beta-2 large chain; Neuron-specific vesicle coat protein beta-NAP
Species	Human
Expression System	E. coli
Accession	Q13367
Molecular Weight	Predictes a molecular mass of 42.10 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 42 kDa band.

Product Information

Sequence Region	297-654
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 297-654 aa (Q13367) 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-3 complex subunit beta-2 (AP3B2) fragment (residues 297-654) from Homo sapiens, designed for structural and biochemical studies. This 358-amino acid fragment represents a stable, soluble region of the protein, facilitating investigations into adaptor protein complex function in intracellular protein sorting. AP-3 complex subunit beta-2 is a component of the adaptor protein complex 3 (AP-3), which plays a critical role in protein sorting within the late-Golgi/trans-Golgi network (TGN) and endosomes. The AP complexes mediate clathrin recruitment to membranes and recognize sorting signals in transmembrane cargo molecules. AP-3 specifically facilitates the sorting of transmembrane proteins destined for lysosomes and lysosome-related organelles. In neurons, it collaborates with the BLOC-1 complex to target cargos into vesicles at cell bodies for delivery to neurites and nerve terminals. The protein localizes to cytoplasmic vesicles, clathrin-coated vesicle membranes, and the Golgi apparatus, where it forms part of the coat on coated vesicles. This fragment was selected computationally for its stability and solubility, enabling detailed analysis of AP-3-mediated sorting mechanisms.