Recombinant AT8A1 protein (His tag)

Catalog Number	543924
Synonyms	ATPase class I type 8A member 1; Chromaffin granule ATPase II; P4-ATPase flippase complex alpha subunit ATP8A1
Species	Human
Expression System	E. coli
Accession	Q9Y2Q0
Molecular Weight	Predictes a molecular mass of 56.64 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 58 kDa band.

Product Information

Sequence Region	367-857
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, 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 367-857 aa (Q9Y2Q0) 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 Human ATP8A1 (367-857) is a high-purity, stable fragment of Phospholipid-transporting ATPase IA, designed for structural and biochemical studies. This 491-amino acid fragment retains key properties for investigating the ATP-dependent flippase activity central to phospholipid transport and membrane asymmetry. Phospholipid-transporting ATPase IA (ATP8A1) is a P4-ATPase flippase complex catalytic component that hydrolyzes ATP to transport aminophospholipids like phosphatidylserine from the outer to inner membrane leaflet, maintaining phospholipid asymmetry. It localizes to cytoplasmic vesicles, chromaffin granule membranes, the cell membrane, endoplasmic reticulum, and Golgi apparatus, with exit from the endoplasmic reticulum dependent on TMEM30A. The protein plays roles in vesicle formation, lipid signaling uptake, and cell migration regulation via phosphatidylethanolamine translocation, particularly in neuronal cells and red blood cell membranes.