Recombinant ABCAD protein (His tag)

Catalog Number	543043
Species	Human
Expression System	E. coli
Accession	Q86UQ4
Molecular Weight	Predictes a molecular mass of 29.48 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 30 kDa band.

Product Information

Sequence Region	259-498
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, 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 259-498 aa (Q86UQ4) 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 ATP-binding cassette sub-family A member 13 (EC 7.6.2.-) fragment (residues 259-498) is a high-purity protein designed for structural and biochemical studies. This 240-amino acid fragment was computationally optimized for stability and solubility, enabling reliable investigation of ABCA13's role in lipid transport and neuronal function. The full-length ATP-binding cassette sub-family A member 13 (ABCA13) protein functions in cholesterol and ganglioside transport from the plasma membrane to intracellular vesicles through ATP hydrolysis-dependent mechanisms. This activity contributes to internalization via endocytic retrograde transport and may participate in synaptic vesicle endocytosis in cortical neurons. ABCA13 localizes to cytoplasmic vesicle membranes as a multi-pass membrane protein, highlighting its importance in intracellular trafficking pathways relevant to neuronal and cellular lipid homeostasis.