Recombinant ABCG4 protein (His tag)

Catalog Number	538933
Species	Human
Expression System	E. coli
Accession	Q9H172
Molecular Weight	Predictes a molecular mass of 32.67 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 33 kDa band.

Product Information

Sequence Region	55-333
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 55-333 aa (Q9H172) 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 ABCG4 (ATP-binding cassette sub-family G member 4) Fragment (aa 55-333) - A high-purity protein fragment encompassing the complete ABC transporter domain, ideal for studying cholesterol transport mechanisms and membrane protein function in neurological and metabolic research. ATP-binding cassette sub-family G member 4 (ABCG4) is a crucial ATP-dependent transporter involved in cellular sterol efflux, particularly cholesterol and desmosterol, to high-density lipoprotein (HDL). This transporter plays a significant role in lipid homeostasis and may contribute to amyloid-beta peptide clearance from the brain, potentially through direct transport or modulation of membrane lipid environment. ABCG4 also demonstrates apoptotic activity in various cell types. The protein localizes to multiple membrane compartments including the cell membrane, cytoplasmic vesicles, and endosomes, functioning as a multi-pass membrane protein. The recombinant fragment (amino acids 55-333) contains the complete ABC transporter domain (61-301), providing researchers with a targeted tool for investigating the specific transport functions and structural characteristics of this important membrane protein.