Recombinant ABCA5 protein (His tag)

Catalog Number	547835
Synonyms	ATP-binding cassette sub-family A member 5
Species	Human
Expression System	E. coli
Accession	Q8WWZ7
Molecular Weight	Predictes a molecular mass of 49.16 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 53 kDa band.

Product Information

Sequence Region	1228-1642
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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 1228-1642 aa (Q8WWZ7) 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 ABCA5 Fragment (AA 1228-1642) is a high-purity protein fragment encompassing the critical ABC transporter 2 domain of the cholesterol transporter ABCA5. This product is engineered to support studies on cholesterol efflux mechanisms and HDL formation, providing researchers with a targeted tool for domain-specific functional analysis. The full-length ABCA5 protein is an ATP-binding cassette transporter in humans that functions as a cholesterol efflux transporter in macrophages. It plays a key role in APOAI/high-density lipoprotein (HDL) formation at the plasma membrane under high cholesterol conditions and contributes to reverse cholesterol transport, a process vital for cardiovascular health. ABCA5 is localized to multiple membrane compartments, including the Golgi apparatus, lysosomes, late endosomes, and the cell membrane, with its plasma membrane localization enhanced under high cholesterol levels. This protein may also participate in autolysosome processing, linking cholesterol transport to cellular degradation pathways.