Recombinant ABCB6 protein (His tag)

Catalog Number	541313
Synonyms	ABC-type heme transporter ABCB6; Mitochondrial ABC transporter 3; Mt-ABC transporter 3; P-glycoprotein-related protein; Ubiquitously-expressed mammalian ABC half transporter
Species	Human
Expression System	E. coli
Accession	Q9NP58
Molecular Weight	Predictes a molecular mass of 33.72 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 35 kDa band.

Product Information

Sequence Region	551-842
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 551-842 aa (Q9NP58) 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 ABCB6 Fragment (551-842) is a high-purity protein product encompassing the critical ABC transporter domain (590-824) of ATP-binding cassette sub-family B member 6. This fragment serves as an essential tool for investigating ATP-dependent transport mechanisms, porphyrin handling, and multidrug resistance pathways in a defined experimental context. The full-length ABCB6 protein, also known as the mitochondrial ABC transporter 3, is an ATP-dependent transporter with broad biological significance. It facilitates the transport of various porphyrins across cellular membranes, contributing to heme biosynthesis regulation, iron homeostasis coordination, and cellular protection against toxic metals and chemotherapeutic agents like 5-fluorouracil and vincristine. ABCB6 localizes to multiple membrane compartments including the plasma membrane, mitochondrial outer membrane, endoplasmic reticulum, Golgi apparatus, endosomes, lysosomes, and melanosomes, reflecting its diverse functional roles in porphyrin trafficking, melanogenesis, and endolysosomal processing. Its presence in erythrocyte membranes and exosomes further underscores its importance in cellular export and intercellular communication processes.