Recombinant ABCD3 protein (His tag)

Catalog Number	542238
Synonyms	70 kDa peroxisomal membrane protein; PMP70
Species	Human
Expression System	E. coli
Accession	P28288
Molecular Weight	Predictes a molecular mass of 38.81 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 39 kDa band.

Product Information

Sequence Region	334-659
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, 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 334-659 aa (P28288) 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 D member 3 (ABCD3) Fragment (residues 334-659) – a high-purity protein tool designed for investigating the ATP-binding cassette (ABC) transporter domain. This fragment enables focused studies on fatty acid transport mechanisms and peroxisomal beta-oxidation pathways. The full-length ATP-binding cassette sub-family D member 3 (ABCD3), also known as PMP70, is a peroxisomal membrane protein that functions as a broad-substrate ATP-dependent transporter. It facilitates the transport of long-chain fatty acids-CoA, dicarboxylates-CoA, branched-chain fatty acids-CoA, and bile acids into peroxisomes for beta-oxidation. ABCD3 also exhibits fatty acyl-CoA thioesterase and ATPase activities, playing a critical role in regulating fatty acid metabolism and energy homeostasis. Located in the peroxisomal membrane as a multi-pass transmembrane protein, it is essential for lipid processing and metabolic regulation in human cells.