Recombinant STAR3 protein (His tag)

Catalog Number	538063
Synonyms	Metastatic lymph node gene 64 protein; MLN 64; Protein CAB1; START domain-containing protein 3; StARD3
Species	Human
Expression System	E. coli
Accession	Q14849
Molecular Weight	Predictes a molecular mass of 26.23 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 26 kDa band.

Product Information

Sequence Region	230-445
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, 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 230-445 aa (Q14849) 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 STARD3 (StAR-related lipid transfer protein 3) Fragment (aa 230-445) is a high-purity protein encompassing the full START domain, designed for investigating sterol and lipid transport mechanisms. This fragment serves as an essential tool for studying domain-specific functions in cholesterol trafficking and membrane dynamics. STARD3, also known as Metastatic lymph node gene 64 protein, is a sterol-binding protein that primarily mediates cholesterol transport from the endoplasmic reticulum to endosomes. Its function is triggered by phosphorylation of the FFAT motif, enabling membrane tethering between the endoplasmic reticulum and late endosomes through interactions with VAPA and VAPB. As a lipid transfer protein, STARD3 redirects sterols to endosomes, promoting internal membrane formation, and may also bind other lipids like lutein. The protein localizes to late endosome membranes as a multi-pass membrane protein and associates with endoplasmic reticulum contact sites via VAPA/VAPB interactions, playing a critical role in intracellular lipid homeostasis and membrane biology.