Recombinant MSPD2 protein (His tag)

Catalog Number	540805
Species	Human
Expression System	E. coli
Accession	Q8NHP6
Molecular Weight	Predictes a molecular mass of 30.52 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 32 kDa band.

Product Information

Sequence Region	1-242
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 1-242 aa (Q8NHP6) 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 Motile Sperm Domain-containing Protein 2 (MOSPD2) Fragment (aa 1-242) – a high-purity protein designed for studying endoplasmic reticulum contact sites and lipid droplet dynamics. This fragment fully encompasses the CRAL-TRIO functional domain, making it an essential tool for investigating organelle interactions and cellular migration mechanisms. Motile Sperm Domain-containing Protein 2 (MOSPD2) is an endoplasmic reticulum-anchored membrane protein that plays a critical role in mediating contact site formation between the endoplasmic reticulum and various organelles including endosomes, mitochondria, Golgi apparatus, and lipid droplets. Through interactions with FFAT-containing proteins and direct membrane binding via an amphipathic helix, MOSPD2 regulates organelle communication and lipid droplet homeostasis. Additionally, it promotes migration of immune cells such as monocytes and neutrophils in response to chemokine signaling. The protein dynamically localizes to specialized endoplasmic reticulum subdomains, particularly at membrane contact sites, highlighting its importance in intracellular organization and trafficking pathways.