Recombinant STML2 protein (His tag)

Catalog Number	546203
Synonyms	SLP-2; EPB72-like protein 2; Paraprotein target 7; Paratarg-7
Species	Human
Expression System	E. coli
Accession	Q9UJZ1
Molecular Weight	Predictes a molecular mass of 32.54 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 33 kDa band.

Product Information

Sequence Region	32-311
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, 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 32-311 aa (Q9UJZ1) 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 Stomatin-like protein 2 (SLP-2) fragment (residues 32-311) is a high-purity, stable protein designed for mitochondrial function and membrane organization research. This 280-amino acid fragment retains key structural features for studying SLP-2's role in cellular energy regulation and stress response pathways. Stomatin-like protein 2 (SLP-2) is a crucial mitochondrial protein that regulates mitochondrial biogenesis and activity in human cells. It stimulates cardiolipin biosynthesis and binds to cardiolipin-enriched membranes, where it recruits and stabilizes proteins like prohibitin to organize functional microdomains. SLP-2 plays vital roles in multiple biological processes including cell migration, proliferation, T-cell activation, calcium homeostasis, and cellular stress response. It is required for mitochondrial hyperfusion, a pro-survival mechanism that enhances ATP production. The protein localizes primarily to mitochondrial inner membranes as a lipid-anchored protein, with additional presence in mitochondrial intermembrane space, cytoplasm, cytoskeleton, membrane rafts, and plasma membrane. In activated T-cells, it associates with the actin cytoskeleton and enriches at the immunological synapse, indicating its importance in immune cell signaling.