Recombinant TIM13 protein (His tag)

Catalog Number	534965
Species	Caenorhabditis elegans
Expression System	E. coli
Accession	O45319
Gene ID	172686
Molecular Weight	Predictes a molecular mass of 13.34 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 13 kDa band.

Product Information

Sequence Region	1-108
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 1-108 aa (O45319) 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 Mitochondrial import inner membrane translocase subunit tim-13 fragment (residues 1-108) from Caenorhabditis elegans, offering a stable and soluble unit for structural and functional studies of mitochondrial protein import machinery. The full-length Mitochondrial import inner membrane translocase subunit tim-13 (gene tin-13, UniProt O45319) functions as a mitochondrial intermembrane chaperone essential for importing and inserting multi-pass transmembrane proteins into the inner membrane. It facilitates the transfer of beta-barrel precursors from the TOM complex to the SAM complex, preventing aggregation of hydrophobic precursors and guiding them through the intermembrane space. This protein is localized to the mitochondrial inner membrane as a peripheral membrane protein on the intermembrane side, playing a critical role in maintaining mitochondrial protein homeostasis and integrity.