Recombinant TIM13 protein (His tag)

Catalog Number	536259
Species	Drosophila melanogaster
Expression System	E. coli
Accession	Q9VTN3
Gene ID	39327
Molecular Weight	Predictes a molecular mass of 12.35 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 12 kDa band.

Product Information

Sequence Region	1-92
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, 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 1-92 aa (Q9VTN3) 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 Tim13 (fragment 1-92) from Drosophila melanogaster is a high-quality protein preparation ideal for studying mitochondrial protein import mechanisms. This stable, soluble fragment represents a functional domain of the Tim13 chaperone, optimized for structural and biochemical applications in mitochondrial research. The full-length Tim13 protein functions as a mitochondrial intermembrane chaperone that facilitates the import and insertion of multi-pass transmembrane proteins into the mitochondrial inner membrane. Located in the mitochondrial inner membrane as a peripheral membrane protein on the intermembrane side, Tim13 plays a crucial role in protecting hydrophobic precursors from aggregation and guiding them through the mitochondrial intermembrane space. It operates within the Tim8-Tim13 complex to mediate protein import and is additionally involved in transferring beta-barrel precursors from the TOM complex to the outer membrane's sorting and assembly machinery (SAM complex). While the Tim8-Tim13 complex handles specific protein imports, the related Tim9-Tim10 complex manages the import of a broader range of mitochondrial proteins.