Recombinant TIM10 protein (His tag)

Catalog Number	547131
Species	Human
Expression System	E. coli
Accession	P62072
Molecular Weight	Predictes a molecular mass of 11.99 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 13 kDa band.

Product Information

Sequence Region	1-90
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, 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 1-90 aa (P62072) 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 Mitochondrial import inner membrane translocase subunit Tim10 (TIMM10) fragment (residues 1-90) is a high-purity protein designed for structural and biochemical studies. This stable, soluble fragment represents a key functional region of the protein, ideal for investigating mitochondrial protein import mechanisms and chaperone activity. The full-length Mitochondrial import inner membrane translocase subunit Tim10 functions as a mitochondrial intermembrane chaperone that facilitates the import and insertion of multi-pass transmembrane proteins into the mitochondrial inner membrane. It plays a crucial role in protecting hydrophobic precursors from aggregation and guiding them through the mitochondrial intermembrane space, and may assist in transferring beta-barrel precursors to the outer membrane's sorting machinery. The protein localizes to the mitochondrial inner membrane as a peripheral membrane protein on the intermembrane side, where it executes its essential chaperone functions in mitochondrial biogenesis.