Recombinant TIM8B protein (His tag)

Catalog Number	549967
Synonyms	DDP-like protein; Deafness dystonia protein 2
Species	Human
Expression System	E. coli
Accession	Q9Y5J9
Molecular Weight	Predictes a molecular mass of 10.87 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 11 kDa band.

Product Information

Sequence Region	2-83
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, 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 2-83 aa (Q9Y5J9) 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 Tim8 B (TIMM8B) fragment (residues 2-83) is a high-purity protein designed for structural and biochemical studies. This fragment represents a stable, soluble unit of the protein, ideal for investigating its role as a mitochondrial intermembrane chaperone in protein import and membrane insertion processes. The full-length Mitochondrial import inner membrane translocase subunit Tim8 B (also known as Deafness dystonia protein 2) functions as a probable mitochondrial intermembrane chaperone in humans. It plays a critical role in the import and insertion of multi-pass transmembrane proteins into the mitochondrial inner membrane and facilitates the transfer of beta-barrel precursors from the TOM complex to the SAM complex of the outer membrane. Acting as a chaperone-like protein, it protects hydrophobic precursors from aggregation and guides them through the mitochondrial intermembrane space. The protein is localized to the mitochondrial inner membrane as a peripheral membrane protein on the intermembrane side, where it contributes to essential protein sorting and assembly mechanisms.