Recombinant TIM14 protein (His tag)

Catalog Number	540965
Synonyms	DnaJ homolog subfamily C member 19
Species	Human
Expression System	E. coli
Accession	Q96DA6
Molecular Weight	Predictes a molecular mass of 11.80 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 12 kDa band.

Product Information

Sequence Region	25-116
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 25-116 aa (Q96DA6) 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	This recombinant protein is a fragment of the Mitochondrial import inner membrane translocase subunit TIM14 (DnaJ homolog subfamily C member 19), encoded by the DNAJC19 gene in Homo sapiens. The fragment spans residues 25-116 and fully encompasses the J domain, making it an ideal tool for investigating the specific functional roles of this domain in mitochondrial protein import and chaperone activity. The full-length Mitochondrial import inner membrane translocase subunit TIM14 (DNAJC19) is a mitochondrial co-chaperone located in the inner mitochondrial membrane, with its functional domains oriented toward the matrix side. It forms a complex with prohibitins to regulate cardiolipin remodeling and is a potential component of the PAM complex, which facilitates ATP-dependent translocation of transit peptide-containing proteins from the inner membrane into the mitochondrial matrix. Acting as a co-chaperone, it stimulates ATP-dependent activity, underscoring its critical role in mitochondrial protein import and inner membrane dynamics.