Recombinant TOM20 protein (His tag)

Catalog Number	545018
Synonyms	Mitochondrial 20 kDa outer membrane protein; Outer mitochondrial membrane receptor Tom20
Species	Human
Expression System	E. coli
Accession	Q15388
Molecular Weight	Predictes a molecular mass of 15.47 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 16 kDa band.

Product Information

Sequence Region	25-145
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 25-145 aa (Q15388) 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 TOM20 (25-145) is a high-quality, stable fragment of the Mitochondrial Import Receptor Subunit TOM20 homolog, designed for structural and biochemical studies. This 121-amino acid soluble unit facilitates research into mitochondrial protein import mechanisms, offering researchers a reliable tool for investigating preprotein recognition and translocation processes. The full-length TOM20 protein is a central component of the mitochondrial outer membrane receptor complex, responsible for recognizing and translocating cytosolically synthesized mitochondrial preproteins. It functions alongside TOM22 as a transit peptide receptor, facilitating the movement of preproteins into the TOM40 translocation pore. TOM20 is specifically required for the mitochondrial import of cytochrome P450 monooxygenases. As a single-pass membrane protein localized to the mitochondrial outer membrane, it plays a critical role in maintaining mitochondrial function and cellular energy metabolism through its essential role in protein import machinery.