Recombinant FIS1 protein (His tag)

Catalog Number	548573
Synonyms	FIS1 homolog; hFis1; Tetratricopeptide repeat protein 11; TPR repeat protein 11
Species	Human
Expression System	E. coli
Accession	Q9Y3D6
Molecular Weight	Predictes a molecular mass of 15.87 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 17 kDa band.

Product Information

Sequence Region	1-122
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, 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 1-122 aa (Q9Y3D6) 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 product is a recombinant fragment of the Mitochondrial fission 1 protein (hFis1), encompassing amino acids 1-122. It is designed for researchers studying mitochondrial dynamics, fission mechanisms, and cellular homeostasis, offering a stable and soluble unit ideal for structural and biochemical investigations. The full-length Mitochondrial fission 1 protein (FIS1) in Homo sapiens plays a critical role in regulating mitochondrial and peroxisomal fission, contributing to the fragmentation and perinuclear clustering of the mitochondrial network. It is involved in recruiting dynamin-related protein 1 (DNM1L) to mitochondrial surfaces, though it may not be essential for all fission events, and also participates in processes like mitophagy and apoptosis by inducing cytochrome c release. Located on the outer membranes of mitochondria and peroxisomes as a single-pass membrane protein, FIS1 is key to understanding cellular energy balance, organelle dynamics, and programmed cell death pathways, with implications in neurodegenerative diseases and metabolic disorders.