Recombinant TXND5 protein (His tag)

Catalog Number	543165
Synonyms	Endoplasmic reticulum resident protein 46; ER protein 46; ERp46; Thioredoxin-like protein p46
Species	Human
Expression System	E. coli
Accession	Q8NBS9
Molecular Weight	Predictes a molecular mass of 43.63 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 46 kDa band.

Product Information

Sequence Region	59-432
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, 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 59-432 aa (Q8NBS9) 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 Thioredoxin domain-containing protein 5 (TXNDC5) fragment (amino acids 59-432), encompassing the complete Thioredoxin 2 and Thioredoxin 3 domains. This high-purity protein is ideal for studying protein disulfide isomerase activity and endoplasmic reticulum redox regulation mechanisms. Thioredoxin domain-containing protein 5 (TXNDC5), also known as ERp46, is a protein disulfide isomerase located in the endoplasmic reticulum lumen. It plays a crucial role in the formation of disulfide bonds in proteins during protein folding and maturation processes. The enzyme demonstrates the ability to reduce insulin disulfide bonds, highlighting its redox activity in maintaining proper protein structure and function within the endoplasmic reticulum compartment.