Recombinant TXND8 protein (His tag)

Catalog Number	549520
Synonyms	Spermatid-specific thioredoxin-3; Sptrx-3; Thioredoxin-6
Species	Human
Expression System	E. coli
Accession	Q6A555
Molecular Weight	Predictes a molecular mass of 16.23 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 16 kDa band.

Product Information

Sequence Region	1-127
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 1-127 aa (Q6A555) 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 8 (TXNDC8) fragment (residues 1-127) is a high-purity protein designed for studying the thioredoxin domain's role in disulfide bond reduction and acrosomal biogenesis. This fragment fully encompasses the functional thioredoxin domain, making it an ideal tool for targeted biochemical and functional assays. The full-length Thioredoxin domain-containing protein 8 (TXNDC8), also known as Spermatid-specific thioredoxin-3 (Sptrx-3), is implicated in post-translational modifications essential for acrosomal biogenesis during spermatogenesis. It functions by reducing disulfide bonds within sperm proteins, contributing to proper sperm development and function. Subcellular localization studies indicate its presence in the cytoplasm and Golgi apparatus, suggesting roles in protein processing and trafficking within these compartments. This protein's involvement in reproductive biology makes it significant for research on male fertility and cellular redox regulation.