Recombinant PDILT protein (His tag)

Catalog Number	547755
Species	Human
Expression System	E. coli
Accession	Q8N807
Molecular Weight	Predictes a molecular mass of 55.99 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 58 kDa band.

Product Information

Sequence Region	32-503
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, 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 32-503 aa (Q8N807) 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 PDILT (Protein disulfide-isomerase-like protein of the testis) fragment (residues 32-503) is a high-purity protein designed for investigating redox-inactive chaperone functions in spermatogenesis. This 472-amino acid fragment fully encompasses the critical Thioredoxin domain, making it an ideal tool for domain-specific functional studies. Protein disulfide-isomerase-like protein of the testis (PDILT), encoded by the PDILT gene, is a probable redox-inactive chaperone that plays an essential role in spermatogenesis. Unlike typical protein disulfide isomerases, PDILT functions primarily as a chaperone rather than participating in redox reactions. The protein localizes to the endoplasmic reticulum, where it contributes to proper protein folding and quality control processes crucial for male germ cell development and fertility. The specific involvement of PDILT in spermatogenesis highlights its importance in reproductive biology and potential relevance to male infertility research.