Recombinant TXND6 protein (His tag)

Catalog Number	549009
Synonyms	Thioredoxin-like protein 2; Txl-2
Species	Human
Expression System	E. coli
Accession	Q86XW9
Molecular Weight	Predictes a molecular mass of 35.00 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 40 kDa band.

Product Information

Sequence Region	1-296
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, 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 1-296 aa (Q86XW9) 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	Explore the functional dynamics of Thioredoxin domain-containing protein 6 (Txl-2), a key regulator of microtubule physiology, with our high-purity recombinant fragment spanning amino acids 1-296. This product is engineered to encompass the complete Thioredoxin domain, offering researchers a precise tool to investigate domain-specific mechanisms in cytoskeletal and ciliary functions. Thioredoxin domain-containing protein 6, encoded by the NME9 gene in humans, is implicated as a regulator of microtubule physiology, playing a role in maintaining microtubule integrity and function. It localizes to the cytoplasm, cytoskeleton, and specifically to the cilium axoneme, where it is associated with dynein axonemal particles. The protein is also detected in cilia of lung epithelium and the spermatid tail, highlighting its significance in cellular structures involved in motility and sensory processes. Its association with microtubules underscores its potential involvement in cell division, intracellular transport, and ciliary function, making it a protein of interest in studies of cellular dynamics and related disorders.