Recombinant TSN protein (His tag)

Catalog Number	542722
Synonyms	Component 3 of promoter of RISC; C3PO
Species	Human
Expression System	E. coli
Accession	Q15631
Molecular Weight	Predictes a molecular mass of 27.84 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 30 kDa band.

Product Information

Sequence Region	1-228
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 1-228 aa (Q15631) 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 offers a recombinant fragment of human Translin (TSN), also known as Component 3 of promoter of RISC (C3PO), spanning amino acids 1-228. This fragment is engineered for stability and solubility, making it ideal for structural studies, biochemical assays, and investigations into its roles in nucleic acid binding and RNA-induced silencing complex activation. Translin (TSN) is a multifunctional DNA-binding protein that recognizes consensus sequences at chromosomal translocation breakpoints, particularly in immunoglobulin and T-cell receptor gene segments, and binds single-stranded DNA ends from staggered breaks at recombination hotspots. It also exhibits single- and double-stranded endoribonuclease activity and may activate the RNA-induced silencing complex (RISC) by promoting cleavage of the siRNA passenger strand. The protein localizes to both the cytoplasm and nucleus, underscoring its involvement in diverse cellular processes related to nucleic acid metabolism and gene regulation.