Recombinant TDIF2 protein (His tag)

Catalog Number	545142
Synonyms	Estrogen receptor-binding protein; LPTS-interacting protein 2; LPTS-RP2; Terminal deoxynucleotidyltransferase-interacting factor 2; TdIF2; TdT-interacting factor 2
Species	Human
Expression System	E. coli
Accession	Q5QJE6
Molecular Weight	Predictes a molecular mass of 20.39 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 21 kDa band.

Product Information

Sequence Region	600-756
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, 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 600-756 aa (Q5QJE6) 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 recombinant protein product features a stable and soluble fragment (residues 600-756) of Human Deoxynucleotidyltransferase terminal-interacting protein 2 (DNTTIP2), designed for structural and biochemical studies. The fragment represents a computationally optimized region of this multifunctional protein, which regulates transcriptional activity and participates in ribosome biogenesis, offering researchers a reliable tool for investigating chromatin remodeling and ribosomal assembly mechanisms. Deoxynucleotidyltransferase terminal-interacting protein 2 (DNTTIP2) is a nuclear protein that localizes to both the nucleus and nucleolus. It functions as a regulator of transcriptional activity for DNTT and ESR1 (estrogen receptor), potentially acting as a chromatin remodeling protein. Additionally, DNTTIP2 is a component of the small subunit (SSU) processome, the primary precursor of the small eukaryotic ribosomal subunit. Within the nucleolus, it contributes to ribosome biogenesis by associating with nascent pre-rRNA and facilitating RNA folding, modifications, rearrangements, cleavage, and targeted degradation via the RNA exosome. This protein's involvement in transcriptional regulation and essential ribosomal assembly processes underscores its significance in cellular function and molecular biology research.