Recombinant TINF2 protein (His tag)

Catalog Number	538829
Synonyms	TRF1-interacting nuclear protein 2
Species	Human
Expression System	E. coli
Accession	Q9BSI4
Molecular Weight	Predictes a molecular mass of 24.08 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 24 kDa band.

Product Information

Sequence Region	2-199
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 2-199 aa (Q9BSI4) 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 TERF1-interacting nuclear factor 2 (TINF2) fragment (residues 2-199) is a high-quality protein product designed for structural and biochemical studies. This 198-amino acid fragment was computationally selected for its stability and solubility, offering researchers a reliable tool to investigate telomere regulation and shelterin complex assembly mechanisms. TERF1-interacting nuclear factor 2 (TINF2) is a crucial component of the shelterin complex (telosome), which plays essential roles in telomere length regulation and chromosome end protection. The shelterin complex associates with double-stranded TTAGGG telomeric repeats and prevents inappropriate processing of chromosome ends by DNA repair pathways. TINF2 contributes to shelterin complex assembly and, in its isoform 1, may facilitate telomere tethering to the nuclear matrix. The protein localizes to the nucleus and specifically associates with telomeres, highlighting its importance in maintaining genomic stability. This recombinant fragment provides researchers with a valuable reagent to study these fundamental cellular processes without the challenges associated with full-length protein expression.