Recombinant TERF2 protein (His tag)

Catalog Number	540349
Synonyms	TTAGGG repeat-binding factor 2; Telomeric DNA-binding protein
Species	Human
Expression System	E. coli
Accession	Q15554
Molecular Weight	Predictes a molecular mass of 25.66 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 27 kDa band.

Product Information

Sequence Region	86-292
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 86-292 aa (Q15554) 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 Telomeric repeat-binding factor 2 (TERF2) fragment (aa 86-292) is a highly stable and soluble protein unit ideal for structural studies and biochemical assays investigating telomere maintenance mechanisms. Telomeric repeat-binding factor 2 (TERF2) is a crucial human nuclear protein that binds double-stranded TTAGGG telomeric repeats and plays a central role in telomere protection and maintenance. Located at chromosome telomeres, TERF2 recruits key factors like the shelterin complex and DCLRE1B/Apollo to prevent chromosomal end-to-end fusion, regulate telomere length, and facilitate telomeric loop formation. It preferentially binds positive supercoiled DNA and controls DNA topoisomerase activity during telomere replication, making it essential for genomic stability.