Datasheet for ABIN7555714

TRF2 Protein (AA 1-542) (His tag)

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Overview

Quantity:	1 mg
Target:	TRF2 (TERF2)
Protein Characteristics:	AA 1-542
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This TRF2 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant TERF2 Protein expressed in mammalian cells.
Sequence:	MAAGAGTAGP ASGPGVVRDP AASQPRKRPG REGGEGARRS DTMAGGGGSS DGSGRAAGRR ASRSSGRARR GRHEPGLGGP AERGAGEARL EEAVNRWVLK FYFHEALRAF RGSRYGDFRQ IRDIMQALLV RPLGKEHTVS RLLRVMQCLS RIEEGENLDC SFDMEAELTP LESAINVLEM IKTEFTLTEA VVESSRKLVK EAAVIICIKN KEFEKASKIL KKHMSKDPTT QKLRNDLLNI IREKNLAHPV IQNFSYETFQ QKMLRFLESH LDDAEPYLLT MAKKALKSES AASSTGKEDK QPAPGPVEKP PREPARQLRN PPTTIGMMTL KAAFKTLSGA QDSEAAFAKL DQKDLVLPTQ ALPASPALKN KRPRKDENES SAPADGEGGS ELQPKNKRMT ISRLVLEEDS QSTEPSAGLN SSQEAASAPP SKPTVLNQPL PGEKNPKVPK GKWNSSNGVE EKETWVEEDE LFQVQAAPDE DSTTNITKKQ KWTVEESEWV KAGVQKYGEG NWAAISKNYP FVNRTAVMIK DRWRTMKRLG MN **Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.**

Product Details

Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different isoform, please contact us regarding an individual offer.
Characteristics:	Key Benefits: • Made to order protein - from design to production - by highly experienced protein experts. • Protein expressed in mammalian cells and purified in one-step affinity chromatography • The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins. • State-of-the-art algorithm used for plasmid design (Gene synthesis). This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein. If you are not interested in a full length protein, please contact us for individual protein fragments. The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.
Purity:	> 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)
Grade:	custom-made

Target Details

Target:	TRF2 (TERF2)
Alternative Name:	TERF2 (TERF2 Products)
Background:	Telomeric repeat-binding factor 2 (TTAGGG repeat-binding factor 2) (Telomeric DNA-binding protein),FUNCTION: Binds the telomeric double-stranded 5'-TTAGGG-3' repeat and plays a central role in telomere maintenance and protection against end-to-end fusion of chromosomes. In addition to its telomeric DNA-binding role, required to recruit a number of factors and enzymes required for telomere protection, including the shelterin complex, TERF2IP/RAP1 and DCLRE1B/Apollo. Component of the shelterin complex (telosome) that is involved in the regulation of telomere length and protection. Shelterin associates with arrays of double-stranded 5'-TTAGGG-3' repeats added by telomerase and protects chromosome ends, without its protective activity, telomeres are no longer hidden from the DNA damage surveillance and chromosome ends are inappropriately processed by DNA repair pathways. Together with DCLRE1B/Apollo, plays a key role in telomeric loop (T loop) formation by

Target Details

	generating 3' single-stranded overhang at the leading end telomeres: T loops have been proposed to protect chromosome ends from degradation and repair. Required both to recruit DCLRE1B/Apollo to telomeres and activate the exonuclease activity of DCLRE1B/Apollo. Preferentially binds to positive supercoiled DNA. Together with DCLRE1B/Apollo, required to control the amount of DNA topoisomerase (TOP1, TOP2A and TOP2B) needed for telomere replication during fork passage and prevent aberrant telomere topology. Recruits TERF2IP/RAP1 to telomeres, thereby participating in to repressing homology-directed repair (HDR), which can affect telomere length. {ECO:0000269|PubMed:16166375, ECO:0000269|PubMed:20655466, ECO:0000269|PubMed:9476899}.
Molecular Weight:	59.6 kDa
UniProt:	Q15554
Pathways:	Cell Division Cycle, Telomere Maintenance

Application Details

Application Notes:	We expect the protein to work for functional studies. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months