

Datasheet for ABIN7556030 WRAP53 Protein (AA 1-548) (His tag)



Overview

| Quantity: | 1 mg |
|-------------------------------|---|
| Target: | WRAP53 |
| Protein Characteristics: | AA 1-548 |
| Origin: | Human |
| Source: | HEK-293 Cells |
| Protein Type: | Recombinant |
| Purification tag / Conjugate: | This WRAP53 protein is labelled with His tag. |

Product Details

| Product Details | |
|-----------------|--|
| Purpose: | Custom-made recombinant WRAP53 Protein expressed in mammalian cells. |
| Sequence: | MKTLETQPLA PDCCPSDQDP APAHPSPHAS PMNKNADSEL MPPPPERGDP PRLSPDPVAG |
| | SAVSQELREG DPVSLSTPLE TEFGSPSELS PRIEEQELSE NTSLPAEEAN GSLSEEEANG |
| | PELGSGKAME DTSGEPAAED EGDTAWNYSF SQLPRFLSGS WSEFSTQPEN FLKGCKWAPD |
| | GSCILTNSAD NILRIYNLPP ELYHEGEQVE YAEMVPVLRM VEGDTIYDYC WYSLMSSAQP |
| | DTSYVASSSR ENPIHIWDAF TGELRASFRA YNHLDELTAA HSLCFSPDGS QLFCGFNRTV |
| | RVFSTARPGR DCEVRATFAK KQGQSGIISC IAFSPAQPLY ACGSYGRSLG LYAWDDGSPL |
| | ALLGGHQGGI THLCFHPDGN RFFSGARKDA ELLCWDLRQS GYPLWSLGRE VTTNQRIYFD |
| | LDPTGQFLVS GSTSGAVSVW DTDGPGNDGK PEPVLSFLPQ KDCTNGVSLH PSLPLLATAS |
| | GQRVFPEPTE SGDEGEELGL PLLSTRHVHL ECRLQLWWCG GAPDSSIPDD HQGEKGQGGT |
| | EGGVGELI 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: WRAP53 Alternative Name: WRAP53 (WRAP53 Products) Background: Telomerase Cajal body protein 1 (WD repeat-containing protein 79) (WD40 repeat-containing protein antisense to TP53 gene) (WRAP53beta), FUNCTION: RNA chaperone that plays a key role in telomere maintenance and RNA localization to Cajal bodies (PubMed:29804836, PubMed:29695869). Specifically recognizes and binds the Cajal body box (CAB box) present in both small Cajal body RNAs (scaRNAs) and telomerase RNA template component (TERC) (PubMed:19285445, PubMed:20351177, PubMed:29804836, PubMed:29695869). Essential component of the telomerase holoenzyme complex, a ribonucleoprotein complex essential for

the replication of chromosome termini that elongates telomeres in most eukaryotes

(PubMed:19179534, PubMed:20351177, PubMed:26170453, PubMed:29695869). In the

telomerase holoenzyme complex, required to stimulate the catalytic activity of the complex

(PubMed:27525486, PubMed:29804836). Acts by specifically binding the CAB box of the TERC

RNA and controlling the folding of the CR4/CR5 region of the TERC RNA, a critical step for telomerase activity (PubMed:29804836). In addition, also controls telomerase holoenzyme complex localization to Cajal body (PubMed:22547674). During S phase, required for delivery of TERC to telomeres during S phase and for telomerase activity (PubMed:29804836). In addition to its role in telomere maintenance, also required for Cajal body formation, probably by mediating localization of scaRNAs to Cajal bodies (PubMed:19285445, PubMed:21072240). Also plays a role in DNA repair: phosphorylated by ATM in response to DNA damage and relocalizes to sites of DNA double-strand breaks to promote the repair of DNA double-strand breaks (PubMed:25512560, PubMed:27715493). Acts by recruiting the ubiquitin ligase RNF8 to DNA breaks and promote both homologous recombination (HR) and non-homologous end joining (NHEJ) (PubMed:25512560, PubMed:27715493). {ECO:0000269|PubMed:19179534, ECO:0000269|PubMed:19285445, ECO:0000269|PubMed:20351177, ECO:0000269|PubMed:21072240, ECO:0000269|PubMed:22547674, ECO:0000269|PubMed:25512560, ECO:0000269|PubMed:26170453, ECO:0000269|PubMed:27525486, ECO:0000269|PubMed:27715493, ECO:0000269|PubMed:29695869, ECO:0000269|PubMed:29804836}.

Molecular Weight: 59.3 kDa

UniProt: Q9BUR4

Pathways: 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