Datasheet for ABIN3096370

WRAP53 Protein (AA 1-548) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	WRAP53
Protein Characteristics:	AA 1-548
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This WRAP53 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Brand:	AliCE®
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 Strep-Tag is based on experience s 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.
Characteristics:	Key Benefits: • Made in Germany - from design to production - by highly experienced protein experts. • Protein expressed with ALiCE® and purified in one-step affinity chromatography • These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed). • 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. 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. Expression System: • ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from Nicotiana tabacum c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications. • During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein! Concentration: • The concentration of our recombinant proteins is measured using the absorbance at 280nm. • The protein's absorbance will be measured against its specific reference buffer. • We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.
Purification:	One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (AliCE®).
Purity:	> 70-80 % as determined by SDS PAGE, 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:	In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.
Comment:	ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from Nicotiana tabacum c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications. During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer. Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol **Might differ depending on protein.**
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months