Datasheet for ABIN3074463

TRAIP Protein (AA 1-469) (Strep Tag)

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Overview

Quantity:	1 mg
Target:	TRAIP
Protein Characteristics:	AA 1-469
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This TRAIP protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Brand:	AliCE®
Sequence:	MPIRALCTIC SDFFDHSRDV AAIHCGHTFH LQCLIQWFET APSRTCPQCR IQVGKRTIIN KLFFDLAQEE ENVLDAEFLK NELDNVRAQL SQKDKEKRDS QVIIDTLRDT LEERNATVVS LQQALGKAEM LCSTLKKQMK YLEQQQDETK QAQEEARRLR SKMKTMEQIE LLLQSQRPEV EEMIRDMGVG QSAVEQLAVY CVSLKKEYEN LKEARKASGE VADKLRKDLF SSRSKLQTVY SELDQAKLEL KSAQKDLQSA DKEIMSLKKK LTMLQETLNL PPVASETVDR LVLESPAPVE VNLKLRRPSF RDDIDLNATF DVDTPPARPS SSQHGYYEKL CLEKSHSPIQ DVPKKICKGP RKESQLSLGG QSCAGEPDEE LVGAFPIFVR NAILGQKQPK RPRSESSCSK DVVRTGFDGL GGRTKFIQPT DTVMIRPLPV KPKTKVKQRV RVKTVPSLFQ AKLDTFLWS **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.**

Product Details

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:	TRAIP
Alternative Name:	TRAIP (TRAIP Products)
Background:	E3 ubiquitin-protein ligase TRAIP (EC 2.3.2.27) (RING finger protein 206) (TRAF-interacting protein),FUNCTION: E3 ubiquitin ligase required to protect genome stability in response to replication stress (PubMed:25335891, PubMed:26781088, PubMed:27462463, PubMed:26711499, PubMed:26595769, PubMed:31545170). Acts as a key regulator of interstrand cross-link repair, which takes place when both strands of duplex DNA are covalently tethered together, thereby blocking replication and transcription (By similarity). Controls the choice between the two pathways of replication-coupled interstrand-cross-link repair by mediating ubiquitination of MCM7 subunit of the CMG helicase complex (By similarity). Short ubiquitin chains on MCM7 promote recruitment of DNA glycosylase NEIL3 (By similarity). If the interstrand cross-link cannot be cleaved by NEIL3, the ubiquitin chains continue to grow on MCM7, promoting the unloading of the CMG helicase complex by the VCP/p97 ATPase, enabling the Fanconi anemia DNA repair pathway (By similarity). Only catalyzes ubiquitination of MCM7 when forks converge (By similarity). Also involved in the repair of covalent DNA-protein cross-links (DPCs) during DNA synthesis: promotes ubiquitination of DPCs, leading to their degradation by the proteasome (By similarity). Has also been proposed to play a role in promoting translesion synthesis by mediating the assembly of 'Lys-63'-linked poly-ubiquitin chains on the Y-family polymerase POLN in order to facilitate bypass of DNA lesions and preserve genomic integrity (PubMed:24553286). The function in translesion synthesis is however controversial (PubMed:26595769). Acts as a regulator of the spindle assembly checkpoint (PubMed:25335891). Also acts as a negative regulator of innate immune signaling by inhibiting activation of NF-kappa-B mediated by TNF (PubMed:22945920). Negatively regulates TLR3/4- and RIG-I-mediated IRF3 activation and subsequent IFNB1 production and cellular antiviral response by promoting 'Lys-48'-linked polyubiquitination of TNK1 leading to its proteasomal degradation (PubMed:22945920). {ECO:0000250|UniProtKB:Q6NRV0, ECO:0000269|PubMed:22945920, ECO:0000269|PubMed:24553286, ECO:0000269|PubMed:25335891, ECO:0000269|PubMed:26595769, ECO:0000269|PubMed:26711499, ECO:0000269|PubMed:26781088, ECO:0000269|PubMed:27462463, ECO:0000269|PubMed:31545170}.
Molecular Weight:	53.3 kDa
UniProt:	Q9BWF2

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