Datasheet for ABIN3095931

TRIM24 Protein (AA 1-1050) (Strep Tag)

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Overview

Quantity:	1 mg
Target:	TRIM24
Protein Characteristics:	AA 1-1050
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This TRIM24 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Sequence:	MEVAVEKAVA AAAAASAAAS GGPSAAPSGE NEAESRQGPD SERGGEAARL NLLDTCAVCH QNIQSRAPKL LPCLHSFCQR CLPAPQRYLM LPAPMLGSAE TPPPVPAPGS PVSGSSPFAT QVGVIRCPVC SQECAERHII DNFFVKDTTE VPSSTVEKSN QVCTSCEDNA EANGFCVECV EWLCKTCIRA HQRVKFTKDH TVRQKEEVSP EAVGVTSQRP VFCPFHKKEQ LKLYCETCDK LTCRDCQLLE HKEHRYQFIE EAFQNQKVII DTLITKLMEK TKYIKFTGNQ IQNRIIEVNQ NQKQVEQDIK VAIFTLMVEI NKKGKALLHQ LESLAKDHRM KLMQQQQEVA GLSKQLEHVM HFSKWAVSSG SSTALLYSKR LITYRLRHLL RARCDASPVT NNTIQFHCDP SFWAQNIINL GSLVIEDKES QPQMPKQNPV VEQNSQPPSG LSSNQLSKFP TQISLAQLRL QHMQQQVMAQ RQQVQRRPAP VGLPNPRMQG PIQQPSISHQ QPPPRLINFQ NHSPKPNGPV LPPHPQQLRY PPNQNIPRQA IKPNPLQMAF LAQQAIKQWQ ISSGQGTPST TNSTSSTPSS PTITSAAGYD GKAFGSPMID LSSPVGGSYN LPSLPDIDCS STIMLDNIVR KDTNIDHGQP RPPSNRTVQS PNSSVPSPGL AGPVTMTSVH PPIRSPSASS VGSRGSSGSS SKPAGADSTH KVPVVMLEPI

RIKQENSGPP ENYDFPVVIV KQESDEESRP QNANYPRSIL TSLLLNSSQS STSEETVLRS DAPDSTGDQP GLHQDNSSNG KSEWLDPSQK SPLHVGETRK EDDPNEDWCA VCQNGGELLC CEKCPKVFHL SCHVPTLTNF PSGEWICTFC RDLSKPEVEY DCDAPSHNSE KKKTEGLVKL TPIDKRKCER LLLFLYCHEM SLAFQDPVPL TVPDYYKIIK NPMDLSTIKK RLQEDYSMYS KPEDFVADFR LIFQNCAEFN EPDSEVANAG IKLENYFEEL LKNLYPEKRF PKPEFRNESE DNKFSDDSDD DFVQPRKKRL KSIEERQLLK

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 by multi-step, protein-specific process to ensure correct folding and modification.
- 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 will ensure that you receive a correctly folded 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.

Product Details

- The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer.
- We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.

Purification:	Two step purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®): 1. In a first purification step, the protein is purified from the cleared cell lysate using StrepTag capture material. Eluate fractions are analyzed by SDS-PAGE. 2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.
Purity:	>80 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Endotoxin Level:	Low Endotoxin less than 1 EU/mg (< 0.1 ng/mg)

Target Details

Target:	TRIM24
Alternative Name:	TRIM24 (TRIM24 Products)
Background:	Transcription intermediary factor 1-alpha (TIF1-alpha) (EC 2.3.2.27) (E3 ubiquitin-protein ligase TRIM24) (RING finger protein 82) (RING-type E3 ubiquitin transferase TIF1-alpha) (Tripartite motif-containing protein 24),FUNCTION: Transcriptional coactivator that interacts with numerous nuclear receptors and coactivators and modulates the transcription of target genes. Interacts with chromatin depending on histone H3 modifications, having the highest affinity for histone H3 that is both unmodified at 'Lys-4' (H3K4me0) and acetylated at 'Lys-23' (H3K23ac). Has E3 protein-ubiquitin ligase activity. During the DNA damage response, participates in an autoregulatory feedback loop with TP53. Early in response to DNA damage, ATM kinase phosphorylates TRIM24 leading to its ubiquitination and degradation. After sufficient DNA repair has occurred, TP53 activates TRIM24 transcription, ultimately leading to TRIM24-mediated TP53 ubiquitination and degradation (PubMed:24820418). Plays a role in the regulation of cell proliferation and apoptosis, at least in part via its effects on p53/TP53 levels. Up-regulates ligand-dependent transcription activation by AR, GCR/NR3C1, thyroid hormone receptor (TR) and ESR1. Modulates transcription activation by retinoic acid (RA) receptors, including RARA. Plays a role in regulating retinoic acid-dependent proliferation of hepatocytes (By similarity). Participates also in innate immunity by mediating the specific 'Lys-63'-linked ubiquitination of TRAF3 leading to activation of downstream signal transduction of the type I

Target Details

	IFN pathway (PubMed:32324863). Additionally, negatively regulates NLRP3/CASP1/IL-1beta-mediated pyroptosis and cell migration probably by ubiquitinating NLRP3 (PubMed:33724611). {ECO:0000250, ECO:0000269|PubMed:16322096, ECO:0000269|PubMed:19556538, ECO:0000269|PubMed:21164480, ECO:0000269|PubMed:24820418, ECO:0000269|PubMed:32324863, ECO:0000269|PubMed:33724611}.
Molecular Weight:	116.8 kDa
UniProt:	O15164

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. If you have a special request, please contact us.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)