

Datasheet for ABIN3096065

TRIM56 Protein (AA 1-755) (Strep Tag)[Go to Product page](#)**1** Image

Overview

Quantity:	1 mg
Target:	TRIM56
Protein Characteristics:	AA 1-755
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This TRIM56 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Sequence:	MVSHGSSPSL LEALSSDFLA CKICLEQLRA PKTLPCLHTY CQDCLAQLAD GGRVRCPECR ETVPVPPEGV ASFKTNFFVN GLLDLVKARA CGDLRAGKPA CALCPLVGGT STGGPATARC LDCADDLCQA CADGHRCTRQ THTHRVDLV GYRAGWYDEE ARERQAAQCP QHPGEALRFL CQPCSQLLCR ECRLDPHLDH PCLPLAEAVR ARRPGLEGLL AGVDNNLVEL EAARRVEKEA LARLREQAAR VGTQVEEAAE GVLRALLAQK QEVLGQLRAH VEAAEEAARE RLAELEGREQ VARAAAFAR RVLSLGREAE ILSLEGAIAQ RLRQLQGCPW APGPAPCLLP QLELHPGLLD KNCHLLRLSF EEQPPQKDGG KDGAGTQGGG ESQSRREDEP KTERQGGVQP QAGDGAQTPK EEKAQTTREE GAQTTLEEDRA QTPHEDGGPQ PHRGGRPNKK KFKGRLKSI SREPSALGP NLDGSGLLPR PIFYCSFPTR MPGDKRSPRI TGLCPFGPRE ILVADEQNRA LKRFSLNGDY KGTVPVPEGC SPCSVAALQS AVAFSASARL YLINPNGEVQ WRRALSLSQA SHAVAALPSG DRVAVSVAGH VEVYNMEGSL ATRFIPGGKA SRGLRALVFL TTSPQGHFVG SDWQQNSVVI CDGLGQVVGE YKGPGLHGCQ PGSVSVDDKKG YIFLTLREVN KVVILDPKGS LLGDFTLAYH
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GLEKPRVTTM VDGRYLWVSL SNGTIHIFRV RSPDS

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.
- 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

Product Details

(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)
Grade:	Crystallography grade

Target Details

Target:	TRIM56
Alternative Name:	TRIM56 (TRIM56 Products)
Background:	<p>E3 ubiquitin-protein ligase TRIM56 (EC 2.3.2.27) (RING finger protein 109) (Tripartite motif-containing protein 56),FUNCTION: E3 ubiquitin-protein ligase that plays a key role in innate antiviral immunity by mediating ubiquitination of CGAS and STING1 (PubMed:21289118, PubMed:29426904). In response to pathogen- and host-derived double-stranded DNA (dsDNA), targets STING1 to 'Lys-63'-linked ubiquitination, thereby promoting its homodimerization, a step required for the production of type I interferon IFN-beta (By similarity). Also mediate monoubiquitination of CGAS, thereby promoting CGAS oligomerization and subsequent activation (PubMed:29426904). Promotes also TNFalpha-induced NF-kappa-B signaling by mediating 'Lys-63'-linked ubiquitination TAK1, leading to enhanced interaction between TAK1 and CHUK/IKKalpha (PubMed:35952808). Independently of its E3 ubiquitin ligase activity, positive regulator of TLR3 signaling. Potentiates extracellular double stranded RNA (dsRNA)-induced expression of IFNB1 and interferon-stimulated genes ISG15, IFIT1/ISG56, CXCL10, OASL and CCL5/RANTES (PubMed:22948160). Promotes establishment of an antiviral state by TLR3 ligand and TLR3-mediated chemokine induction following infection by hepatitis C virus (PubMed:22948160). Acts as a restriction factor of Zika virus through direct interaction with the viral RNA via its C-terminal region (PubMed:31251739). {ECO:0000250 UniProtKB:Q80VI1, ECO:0000269 PubMed:21289118, ECO:0000269 PubMed:22948160, ECO:0000269 PubMed:29426904, ECO:0000269 PubMed:31251739, ECO:0000269 PubMed:35952808}.</p>
Molecular Weight:	81.5 kDa

Target Details

UniProt: [Q9BRZ2](#)

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.

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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)



Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process