Datasheet for ABIN3127752

TRIM7 Protein (AA 1-510) (Strep Tag)

Go to Product page

Overview

Quantity:	1 mg
Target:	TRIM7
Protein Characteristics:	AA 1-510
Origin:	Mouse
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This TRIM7 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Sequence: MATVGPRTGP NAGAEALALA AELQGEATCS ICLEFFREPV SVECGHSFCR ACIMRCWERP GAGTGTATRT LPCPLPCPQC REPARPSQLR PNRQLAAVVS LLRRFSLPPT APGERGTPAV PARAAAARCS QHGEQLKLYC QDDGRAICVV CDRAREHRSH AVLPLEEAVQ EAKELLDSRL RALKKVLEDY EAFRSTEERE SKELLKQMAA EKEKVGAEFQ ALRAFLVEQE GRLLSRLEVL SREVTQKQNE NLAQLEGEIT QLSKLSGQIQ ETAQKPDLDF LQEFKSTLSK CSSVPSSKPT TVSSEMKNKV WNVSLKSFVL KGLLKKFKED LQGELEKEEK VELTLDPDTA NPRLILSLDL KSVRLGQRAQ DLPNHPRRFD TNTRVLASCG FSSGRHHWEV EVGSKDGWAF GVARESVRRK GLTPFTPEEG VWAMQLNNGQ YWAVTSPERT QLNCGHLSRV RVALDLEVGA VSFYAVEDMR HLYTFRVNFQ ERVFPLFSVC STGTYLRIWP

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 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 (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

Product Details

	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:	TRIM7
Alternative Name:	Trim7 (TRIM7 Products)
Background:	E3 ubiquitin-protein ligase TRIM7 (EC 2.3.2.27) (Glycogenin-interacting protein) (Tripartite motif-containing protein 7),FUNCTION: E3 ubiquitin-protein ligase that have both tumor-promoting and tumor-suppressing activities and functions in several biological processes including innate immunity, regulation of ferroptosis as well as cell proliferation and migration. Acts as an antiviral effector against multiple viruses by targeting specific viral proteins for ubiquitination and degradation including norovirus NTPase protein. Mechanistically, recognizes the C-terminal glutamine-containing motif generated by viral proteases that process the polyproteins and trigger their ubiquitination and subsequent degradation (PubMed:35972292). Mediates 'Lys-63'-linked polyubiquitination and stabilization of the JUN coactivator RNF187 in response to growth factor signaling via the MEK/ERK pathway, thereby regulating JUN transactivation and cellular proliferation (By similarity). Promotes the TLR4-mediated signaling activation through its E3 ligase domain leading to production of pro-inflammatory cytokines and type I interferon (PubMed:30928727). Also plays a negative role in the regulation of exogenous cytosolic DNA virus-triggered immune response. Mechanistically, enhances the 'Lys-48'-linked ubiquitination of STING1 leading to its proteasome-dependent degradation. Mediates the ubiquitination of the SIN3-HDAC chromatin remodeling complex component BRMS1. Modulates NCOA4-mediated ferritinophagy and ferroptosis in glioblastoma cells by ubiquitinating NCOA4, leading to its degradation (PubMed:32126128). {ECO:0000250|UniProtKB:Q9C029, ECO:0000269|PubMed:30928727, ECO:0000269|PubMed:32126128, ECO:0000269|PubMed:35972292}.
Molecular Weight:	57.0 kDa
UniProt:	Q923T7

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)