

Datasheet for ABIN3074893

TRIM55 Protein (AA 1-548) (Strep Tag)[Go to Product page](#)**1** Image

Overview

Quantity:	1 mg
Target:	TRIM55
Protein Characteristics:	AA 1-548
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This TRIM55 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Sequence: MSASLNYSKF SKEQQTMDNL EKQLICPICL EMFTKPVVIL PCQHNLCKRC ASDIFQASNP
YLPTRGGTTM ASGGRFRCPS CRHEVVLDRH GVGGLQRNLL VENIIDYKQ ESTRPEKKSD
QPMCEEHEEE RINIYCLNCE VPTCSLCKVF GAHKDCQVAP LTHVFQRQKS ELSDGIALV
GSNDRVQGVI SQLEDTCCKTI EECCKRQKQE LCEKFDYLYG ILEERKNEMT QVITRTQEEK
LEHVRLIKK YSDHLENVSK LVESGIQFMD EPEMAVFLQN AKTLLKKISE ASKAFQMEKI
EHGYENMNHF TVNLNREEKI IREIDFYRED EDEEEEEEGGE GEKEGEVEVG GEAVEVEEVE
NVQTEFPGED ENPEKASELS QVELQAAPGA LPVSSPEPPP ALPPAADAPV TQGEVVPTGS
EQTTESETPV PAAAEADPL FYPSWYKGQT RKATTNPPCT PGSEGLGQIG PPGSEDSNVR
KAEVAAAAAS ERAAVSGKET SAPAATSQIG FEAPPLQGQA AAPASGSGAD SEPARHIFS
SWLNSLNE

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 (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.

Product Details

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:	TRIM55
Alternative Name:	TRIM55 (TRIM55 Products)
Background:	<p>Tripartite motif-containing protein 55 (EC 2.3.2.27) (Muscle-specific RING finger protein 2) (MuRF-2) (MuRF2) (RING finger protein 29),FUNCTION: E3 ubiquitin ligase that plays an important role in regulating cardiac development and contractility, muscle growth, metabolism, and fiber-type differentiation. Acts as a critical factor that regulates cardiomyocyte size during development in concert with TRIM63 by regulating E2F1-mediated gene expression (By similarity). Plays a role in apoptosis induction in cardiomyocytes by promoting ubiquitination of the DUSP1 phosphatase. Promotes non-canonical NF-kappa-B signaling and B-cell-mediated immune responses by mediating NFKB2 'Lys-48'-linked ubiquitination and processing. In turn, NFKB2 is further processed by valosin-containing protein/VCP, an ATPase that mediates ubiquitin-dependent protein degradation by the proteasome. May play a role in preventing macrophages from producing inflammatory factors and migrating by downregulating the level of nuclear NF-kappa-B subunit RELA. Modifies also PPARG via polyubiquitination and accelerates PPARG proteasomal degradation to inhibit its activity (PubMed:36737649). {ECO:0000250 UniProtKB:G3X8Y1, ECO:0000269 PubMed:36737649, ECO:0000269 PubMed:37816088}.</p>
Molecular Weight:	60.5 kDa
UniProt:	Q9BYV6

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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Application Details

Comment:	<p>ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from <i>Nicotiana tabacum</i> 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.</p> <p>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!</p>
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)

Images



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