

Datasheet for ABIN3074779

**TRIM14 Protein (AA 1-442) (Strep Tag)**[Go to Product page](#)**1** Image

## Overview

Quantity:	1 mg
Target:	TRIM14
Protein Characteristics:	AA 1-442
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This TRIM14 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

## Product Details

Sequence: MAGAATGSRT PGRSELVEGC GWRCPEHGDR VAELFCRRRCR RCVCALCPVL GAHRGHPVGL  
ALEAAVHVQK LSQECLKQLA IKKQQHIDNI TQIEDATEKL KANAESSKTW LKGKFTLRL  
LLDEEEALAK KFIDKNTQLT LQVYREQADS CREQLDIMND LSNRVWSISQ EPDPVQRLQA  
YTATEQEMQQ QMSLGELCHP VPLSFEPVKS FFKGLVEAVE STLQTPLDIR LKESINCQLS  
DPSSTKPGTL LKTSPSPERS LLLKYARTPT LDPDTMHARL RLSADRLTVR CGLLGSLGPV  
PVLRFDALWQ VLARDCFATG RHYWEVDVQE AGAGWWVGAA YASLRRRGAS AAARLGCNRQ  
SWCLKRYDLE YWAFHDGQRS RLRPRDDLDR LGVFLDYEAG VLAFYDVTGG MSHLHTFRAT  
FQEPLYPALR LWEGAISIPR LP

**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:
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- 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.

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### 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.

## Product Details

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:	TRIM14
Alternative Name:	TRIM14 ( <a href="#">TRIM14 Products</a> )
Background:	<p>Tripartite motif-containing protein 14,FUNCTION: Plays an essential role in the innate immune defense against viruses and bacteria (PubMed:30150992, PubMed:32404352). Promotes the 'Lys-48'-linked ubiquitination and subsequent degradation of hepatitis C virus NS5A leading to the inhibition of viral replication (PubMed:27578425). Plays also a role in the inhibition of ebolavirus infection by enhancing IFN-beta and NF-kappa-B activation after binding to the viral protein NP (PubMed:37562033). Facilitates the type I IFN response by interacting with MAVS at the outer mitochondria membrane and thereby recruiting NF-kappa-B essential modulator IKBKG/NEMO to the MAVS signalosome, leading to the activation of both the IFN regulatory factor 3/IRF3 and NF-kappa-B pathways (PubMed:24379373). Positively regulates the CGAS-induced type I interferon signaling pathway by stabilizing CGAS and inhibiting its autophagic degradation (PubMed:27666593). Acts as a scaffold between TBK1 and STAT3 to promote phosphorylation of STAT3 and resolve interferon-stimulated gene (ISG) expression (PubMed:32404352). Inhibits the transcriptional activity of SPI1 in a dose-dependent manner (By similarity). Inhibits also OPTN-mediated selective autophagic degradation of KDM4D and thereby negatively regulates H3K9me2 and H3K9me3. Mechanistically, recruits USP14 to remove the 'Lys-63'-linked ubiquitination of KDM4D, preventing its recognition by OPTN and subsequent degradation (PubMed:35145029). {ECO:0000250 UniProtKB:Q8BVW3, ECO:0000269 PubMed:24379373, ECO:0000269 PubMed:27578425, ECO:0000269 PubMed:27666593, ECO:0000269 PubMed:29053956, ECO:0000269 PubMed:30150992, ECO:0000269 PubMed:32404352, ECO:0000269 PubMed:35145029, ECO:0000269 PubMed:37562033}.</p>
Molecular Weight:	49.8 kDa
UniProt:	<a href="#">Q14142</a>

## Application Details

Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies
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Application Details

	as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.
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)



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