

Datasheet for ABIN3095801

## TICAM1 Protein (AA 1-712) (Strep Tag)



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### Overview

Quantity:	250 µg
Target:	TICAM1
Protein Characteristics:	AA 1-712
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This TICAM1 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

### Product Details

Brand:	AliCE®
Sequence:	<p>MACTGPSLPS AFDILGAAGQ DKLLYLKHKL KTPRPGCQGQ DLLHAMVLLK LGQETEARIS</p> <p>LEALKADAVA RLVARQWAGV DSTEDPEEPP DVSWAVARLY HLLAEELCP ASLRDVAYQE</p> <p>AVRTLSSRDD HRLGELQDEA RNRCGWDIAG DPGSIRTLQS NLGCLPPSSA LPSGTRSLPR</p> <p>PIDGVSDWSQ GCSLRSTGSP ASLASNLEIS QSPTMPFSL HRSPhGPSKL CDDPQASLVP</p> <p>EPVPGGCQEP EEMSWPPSGE IASPPPELSS PPPGLPEVAP DATSTGLPDT PAAPETSTNY</p> <p>PVECTEGSAG PQSLPLPILE PVKNPCSVKD QTPLQLSVED TTSPNTKPCP PTPTTPETSP</p> <p>PPPPPPPSST PCSAHLTPSS LFPSSLESSS EQKFYNFVIL HARADEHIAL RVREKLEALG</p> <p>VPDGATFCED FQVPGRGELS CLQDAIDHSA FIILLTSNF DCRLSLHQVN QAMMSNLTRQ</p> <p>GSPDCVIPFL PLESSPAQLS SDTASLLSGL VRLDEHSQIF ARKVANTFKP HRLQARKAMW</p> <p>RKEQDTRALR EQSQHLDGER MQAAALNAAY SAYLQSYLSY QAQMEQLQVA FGSHMSFGTG</p> <p>APYGARMFPFG GQVPLGAPPP FPTWPGCPQP PPLHAWQAGT PPPSPQPAA FPQSLPFPQS</p>

PAFPTASPAP PQSPGLQPLI IHHAQMVQLG LNNHMWNQRG SQAPEDKTQE AE

**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.**

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### Characteristics:

#### Key Benefits:

- Made in Germany - from design to production - by highly experienced protein experts.
- Protein expressed with ALiCE® and purified in one-step affinity chromatography
- 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 try to ensure that you receive soluble 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 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:

One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®).

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## Product Details

Purity: > 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).

Grade: custom-made

## Target Details

Target: TICAM1

Alternative Name: TICAM1 ([TICAM1 Products](#))

Background: TIR domain-containing adapter molecule 1 (TICAM-1) (Proline-rich, vinculin and TIR domain-containing protein B) (Putative NF-kappa-B-activating protein 502H) (Toll-interleukin-1 receptor domain-containing adapter protein inducing interferon beta) (MyD88-3) (TIR domain-containing adapter protein inducing IFN-beta),FUNCTION: Involved in innate immunity against invading pathogens. Adapter used by TLR3, TLR4 (through TICAM2) and TLR5 to mediate NF-kappa-B and interferon-regulatory factor (IRF) activation, and to induce apoptosis (PubMed:12471095, PubMed:12539043, PubMed:14739303, PubMed:28747347). Ligand binding to these receptors results in TRIF recruitment through its TIR domain (PubMed:12471095, PubMed:12539043, PubMed:14739303). Distinct protein-interaction motifs allow recruitment of the effector proteins TBK1, TRAF6 and RIPK1, which in turn, lead to the activation of transcription factors IRF3 and IRF7, NF-kappa-B and FADD respectively (PubMed:12471095, PubMed:12539043, PubMed:14739303). Phosphorylation by TBK1 on the pLxIS motif leads to recruitment and subsequent activation of the transcription factor IRF3 to induce expression of type I interferon and exert a potent immunity against invading pathogens (PubMed:25636800). Component of a multi-helicase-TICAM1 complex that acts as a cytoplasmic sensor of viral double-stranded RNA (dsRNA) and plays a role in the activation of a cascade of antiviral responses including the induction of pro-inflammatory cytokines (By similarity). {ECO:0000250|UniProtKB:Q80UF7, ECO:0000269|PubMed:12471095, ECO:0000269|PubMed:12539043, ECO:0000269|PubMed:14739303, ECO:0000269|PubMed:25636800}.

Molecular Weight: 76.4 kDa

UniProt: [Q8IUC6](#)

Pathways: [TLR Signaling](#), [Activation of Innate immune Response](#), [Cellular Response to Molecule of Bacterial Origin](#), [Hepatitis C](#), [Toll-Like Receptors Cascades](#)

## 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

## Application Details

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guarantee though.

Comment:

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Restrictions:

For Research Use only

## Handling

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Format:

Liquid

Buffer:

The buffer composition is at the discretion of the manufacturer.

Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol **Might differ depending on protein.**

Handling Advice:

Avoid repeated freeze-thaw cycles.

Storage:

-80 °C

Storage Comment:

Store at -80°C.

Expiry Date:

12 months