

Datasheet for ABIN3115920

TMTC3 Protein (AA 1-915) (Strep Tag)



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Overview

Quantity:	250 µg
Target:	TMTC3
Protein Characteristics:	AA 1-915
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This TMTC3 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Brand:	AliCE®
Sequence:	<p>MANINLKEIT LIVGVVTACY WNSLFCGFVF DDVSAILDNK DLHPSTPLKT LFQNDFWGTP</p> <p>MSEERSHKSY RPLTVLTFRL NYLLSELKPM SYHLLNMIFH AVVSVIFLKV CKLFLDNKSS</p> <p>VIASLLFAVH PIHTEAVTGV VGRAELLSSI FFLAAFLSYT RSKGPDNSII WTPIALTVFL</p> <p>VAVATLCKEQ GITVVGICCV YEVFIAQGYT LPLLCTTAGQ FLRGKGSIPF SMLQTLVKLI</p> <p>VLMFSTLLLV VIRVQVIQSQ LPVFTRFDNP AAVSPTPTRQ LTFNYLLPVN AWLLLNPSEL</p> <p>CCDWTMG TIP LIESLLDIRN LATFTFFCFL GMLGVFSIRY SGDSSKTVLM ALCLMALPFI</p> <p>PASNLFFPVG FVVAERVLVY PSMGFCILVA HGWQKISTKS VFKKLSWICL SMVILTHSLK</p> <p>TFHRNWDWES EYTLFMSALK VNKNNAKLWN NVGHALENEK NFERALKYFL QATHVQPDDI</p> <p>GAHMNVGRTY KNLNRTKEAE ESYMMAKSLM PQIIPGKKYA ARIAPNHLNV YINLANLIRA</p> <p>NESRLEEADQ LYRQAISMRP DFKQAYISRG ELLLKMNKPL KAKEAYLKAL ELDRNNADLW</p> <p>YNLAIVHIEL KEPNEALKKN FNRALELNPK HKLALFNSAI VMQESGEVKL RPEARKRLLS</p>

YINEEPLDAN GYFNLGMLAM DDKKDNEAEI WMKKAIKLQA DFRSALFNLA LLYSQTAKEL
KALPILEELL RYYPDHIKGL ILKGDILMNQ KKDILGAKKC FERILEMDPS NVQGKHNLCV
VYFEEKDLLK AERCLETLETA LAPHEEYIQR HLNIVRDKIS SSSFIEPIFP TSKISSVEGK KIPTESVKEI
RGESRQTQIV KTSNKSQSK SNKQLGKNGD EETPHKTTKD IKEIEKKRVA ALKRLEEIER ILNGE

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 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.

Product Details

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

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

Grade: custom-made

Target Details

Target: TMTC3

Alternative Name: TMTC3 ([TMTC3 Products](#))

Background: Protein O-mannosyl-transferase TMTC3 (EC 2.4.1.109) (Protein SMILE) (Transmembrane O-mannosyltransferase targeting cadherins 3) (Transmembrane and tetratricopeptide repeat-containing 3),FUNCTION: Transfers mannosyl residues to the hydroxyl group of serine or threonine residues. The 4 members of the TMTC family are O-mannosyl-transferases dedicated primarily to the cadherin superfamily, each member seems to have a distinct role in decorating the cadherin domains with O-linked mannose glycans at specific regions. Also acts as O-mannosyl-transferase on other proteins such as PDIA3 (PubMed:28973932). Involved in the positive regulation of proteasomal protein degradation in the endoplasmic reticulum (ER), and the control of ER stress response. {ECO:0000269|PubMed:21603654, ECO:0000269|PubMed:28973932}.

Molecular Weight: 104.0 kDa

UniProt: [Q6ZXV5](#)

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.

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Application Details

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Restrictions: For Research Use only

Handling

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