

Datasheet for ABIN3095893

## TNS3 Protein (AA 1-1445) (Strep Tag)



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### Overview

Quantity:	250 µg
Target:	TNS3
Protein Characteristics:	AA 1-1445
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This TNS3 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

### Product Details

Brand:	AliCE®
Sequence:	<p> MEEGHGLDLT YITERIIAVS FPAGCSEESY LHNLEQVTRM LKSKHGDNYL VLNLESEKRYD  LTKLNPKIMD VGWPELHAPP LDKMCTICKA QESWLNLSNLQ HVVVIHCRGG KGRIGVVISS  YMHFTNVSAS ADQALDRFAM KKFYDDKVSA LMQPSQKRYV QFLSGLLSGS VKMNASPLFL  HFVILHGTPN FDTGGVCRPF LKLYQAMQPV YTSGIYNVGP ENPSRICIVI EPAQLLKGDV  MVKCYHKKYR SATRDVIFRL QFHTGAVQGY GLVFGKEDLD NASKDDRFPD YGKVELVFSA  TPEKIQGSEH LYNDHGVIDD YNTTDPLIRW DSYENLSADG EVLHTQGPVD GSLYAKVRKK  SSSDPGIPGG PQAIPATNSP DHSHTLSVS SDSGHSTASA RTDKTEERLA PGTRRGLSAQ  EKAELDQLLS GFGLEDPGSS LKEMTDARSK YSGTRHVPA QVHVNGDAAL KDRETDILDD  EMPHHDLHSV DSLGTLSSSE GPQSAHLGPF TCHKSSQNSL LSDGFGSNVG EDPQGTLVPD  LGLGMDGPYE RERTFGSREP KQPQPLLRKP SVSAQMQAYG QSSYSTQTWV RQQQMVAHQ  YSFAPDGEAR LVSRCPADNP GLVQAQPRVP LTPTRGTSSR VAVQRGVGS GPHPPDTQQPS </p>

PSKAFKPRFP GDQVVNGAGP ELSTGPSPGS PTLIDQSIQ LNLRLILELD PTFEPIPTHM  
NALGSQANGS VSPDSVGGGL RASSRLPDTG EGPSRATGRQ GSSAEQPLGG RLRKLSLGQY  
DNDAGGQLPF SKCAWKGAGV DYAPNLPPFP SPADVKETMT PGYPQDLDI DGRILSSKES  
MCSTPAFPVS PETPYVKTAL RHPPFSPPEP PLSSPASQHK GGREPRSCPE TLTHAVGMSE  
SPIGPKSTML RADASSTPSF QQAFASSCTI SSNGPGQRRE SSSSAERQWV ESSPKPMVSL  
LGSGRPTGSP LSAEFGSTRK DSPVLSCFPP SELQAPFHSF ELSLAEPDPS LAPPSSQAFL  
GFGTAPVGS LGPEEDLGAL LANSHGASPT PSIPLTATGA ADNGFLSHNF LTVAPGHSSH  
HSPGLQGQGV TLPGQPPLPE KKRASEGDRS LGSVSPSSSG FSSPHSGSTI SIPFPNVLPD  
FSKASEAASP LPDSPGDKLV IVKFVQDTSK FWYKADISRE QAIAMLDKE PGSFIVRDSH  
SFRGAYGLAM KVATPPPSVL QLNKKAGDLA NELVRHFLIE CTPKGVRLKG CSNEPYFGSL  
TALVCQHSIT PLALPCKLLI PERDPLEEIA ESSPQTAANS AAELLKQGA CNVWYLSVE  
MESLTGHQAI QKALSITLVQ EPPPVSTVVH FKVSAQGITL TDNQRKLFFR RHYPVNSVIF  
CALDPQDRKW IKDGPSSKVF GFVARKQGSA TDNVCHLFAE HDPEQPASAI VNFVSKVMIG SPKKV

**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

## Product Details

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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.

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

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Target:	TNS3
Alternative Name:	TNS3 ( <a href="#">TNS3 Products</a> )
Background:	<p>Tensin-3 (EC 3.1.3.-) (Tensin-like SH2 domain-containing protein 1) (Tumor endothelial marker 6),FUNCTION: May act as a protein phosphatase and/or a lipid phosphatase (Probable). Involved in the dissociation of the integrin-tensin-actin complex (PubMed:17643115). EGF activates TNS4 and down-regulates TNS3 which results in capping the tail of ITGB1 (PubMed:17643115). Increases DOCK5 guanine nucleotide exchange activity towards Rac and plays a role in osteoclast podosome organization (By similarity). Enhances RHOA activation in the presence of DLC1 (PubMed:26427649). Required for growth factor-induced epithelial cell migration, growth factor stimulation induces TNS3 phosphorylation which changes its binding preference from DLC1 to the p85 regulatory subunit of the PI3K kinase complex, displacing PI3K inhibitor PTEN and resulting in translocation of the TNS3-p85 complex to the leading edge of migrating cells to promote RAC1 activation (PubMed:26166433). Meanwhile, PTEN switches binding preference from p85 to DLC1 and the PTEN-DLC1 complex translocates to the posterior of migrating cells to activate RHOA (PubMed:26166433). Acts as an adapter protein by bridging the association of scaffolding protein PEA3 with integrins ITGB1, ITGB3 and ITGB5 which contributes to the promotion of cell migration (PubMed:35687021). Controls tonsil-</p>

## Target Details

derived mesenchymal stem cell proliferation and differentiation by regulating the activity of integrin ITGB1 (PubMed:31905841). {ECO:0000250|UniProtKB:Q5SSZ5, ECO:0000269|PubMed:17643115, ECO:0000269|PubMed:26166433, ECO:0000269|PubMed:26427649, ECO:0000269|PubMed:31905841, ECO:0000269|PubMed:35687021, ECO:0000305}.

Molecular Weight: 155.3 kDa

UniProt: [Q68CZ2](#)

## 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.  
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