

# Datasheet for ABIN7555763 **TNS3 Protein (AA 1-1445) (His tag)**



#### Overview

Quantity:	1 mg
Target:	TNS3
Protein Characteristics:	AA 1-1445
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This TNS3 protein is labelled with His tag.

### **Product Details**

Purpose:	Custom-made recombinant TNS3 Protein expressed in mammalian cells.
Sequence:	MEEGHGLDLT YITERIIAVS FPAGCSEESY LHNLQEVTRM LKSKHGDNYL VLNLSEKRYD
	LTKLNPKIMD VGWPELHAPP LDKMCTICKA QESWLNSNLQ HVVVIHCRGG KGRIGVVISS
	YMHFTNVSAS ADQALDRFAM KKFYDDKVSA LMQPSQKRYV QFLSGLLSGS VKMNASPLFL
	HFVILHGTPN FDTGGVCRPF LKLYQAMQPV YTSGIYNVGP ENPSRICIVI EPAQLLKGDV
	MVKCYHKKYR SATRDVIFRL QFHTGAVQGY GLVFGKEDLD NASKDDRFPD YGKVELVFSA
	TPEKIQGSEH LYNDHGVIVD YNTTDPLIRW DSYENLSADG EVLHTQGPVD GSLYAKVRKK
	SSSDPGIPGG PQAIPATNSP DHSDHTLSVS SDSGHSTASA RTDKTEERLA PGTRRGLSAQ
	EKAELDQLLS GFGLEDPGSS LKEMTDARSK YSGTRHVVPA QVHVNGDAAL KDRETDILDD
	EMPHHDLHSV DSLGTLSSSE GPQSAHLGPF TCHKSSQNSL LSDGFGSNVG EDPQGTLVPD
	LGLGMDGPYE RERTFGSREP KQPQPLLRKP SVSAQMQAYG QSSYSTQTWV RQQQMVVAHQ
	YSFAPDGEAR LVSRCPADNP GLVQAQPRVP LTPTRGTSSR VAVQRGVGSG PHPPDTQQPS
	PSKAFKPRFP GDQVVNGAGP ELSTGPSPGS PTLDIDQSIE QLNRLILELD PTFEPIPTHM

NALGSQANGS VSPDSVGGGL RASSRLPDTG EGPSRATGRQ GSSAEQPLGG RLRKLSLGQY
DNDAGGQLPF SKCAWGKAGV DYAPNLPPFP SPADVKETMT PGYPQDLDII DGRILSSKES
MCSTPAFPVS PETPYVKTAL RHPPFSPPEP PLSSPASQHK GGREPRSCPE TLTHAVGMSE
SPIGPKSTML RADASSTPSF QQAFASSCTI SSNGPGQRRE SSSSAERQWV ESSPKPMVSL
LGSGRPTGSP LSAEFSGTRK DSPVLSCFPP SELQAPFHSH ELSLAEPPDS LAPPSSQAFL
GFGTAPVGSG LPPEEDLGAL LANSHGASPT PSIPLTATGA ADNGFLSHNF LTVAPGHSSH
HSPGLQGQGV TLPGQPPLPE KKRASEGDRS LGSVSPSSSG FSSPHSGSTI SIPFPNVLPD
FSKASEAASP LPDSPGDKLV IVKFVQDTSK FWYKADISRE QAIAMLKDKE PGSFIVRDSH
SFRGAYGLAM KVATPPPSVL QLNKKAGDLA NELVRHFLIE CTPKGVRLKG CSNEPYFGSL
TALVCQHSIT PLALPCKLLI PERDPLEEIA ESSPQTAANS AAELLKQGAA CNVWYLNSVE
MESLTGHQAI QKALSITLVQ EPPPVSTVVH FKVSAQGITL TDNQRKLFFR RHYPVNSVIF
CALDPQDRKW IKDGPSSKVF GFVARKQGSA TDNVCHLFAE HDPEQPASAI VNFVSKVMIG SPKKV

Sequence without tag. The proposed Purification-Tag is based on experiences 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.

Specificity:

If you are looking for a specific domain and are interested in a partial protein or a different isoform, please contact us regarding an individual offer.

Characteristics:

Key Benefits:

- Made to order protein from design to production by highly experienced protein experts.
- · Protein expressed in mammalian cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- 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.

If you are not interested in a full length protein, please contact us for individual protein fragments.

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.

Purity:

> 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)

Grade:

custom-made

## **Target Details**

Target:	TNS3
Alternative Name:	TNS3 (TNS3 Products)
Background:	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 PEAK1 with integrins ITGB1, ITGB3 and ITGB5
	which contributes to the promotion of cell migration (PubMed:35687021). Controls tonsil-
	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:	We expect the protein to work for functional studies. As the protein has not been tested for
	functional studies yet we cannot offer a guarantee though.
Restrictions:	For Research Use only
Handling	
Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.

## Handling

Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months