Datasheet for ABIN3095919

TENC1 Protein (AA 1-1409) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	TENC1
Protein Characteristics:	AA 1-1409
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This TENC1 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Brand:	AliCE®
Sequence:	MKSSGPVERL LRALGRRDSS RAASRPRKAE PHSFREKVFR KKPPVCAVCK VTIDGTGVSC RVCKVATHRK CEAKVTSACQ ALPPVELRRN TAPVRRIEHL GSTKSLNHSK QRSTLPRSFS LDPLMERRWD LDLTYVTERI LAAAFPARPD EQRHRGHLRE LAHVLQSKHR DKYLLFNLSE KRHDLTRLNP KVQDFGWPEL HAPPLDKLCS ICKAMETWLS ADPQHVVVLY CKGNKGKLGV IVSAYMHYSK ISAGADQALA TLTMRKFCED KVATELQPSQ RRYISYFSGL LSGSIRMNSS PLFLHYVLIP MLPAFEPGTG FQPFLKIYQS MQLVYTSGVY HIAGPGPQQL CISLEPALLL KGDVMVTCYH KGGRGTDRTL VFRVQFHTCT IHGPQLTFPK DQLDEAWTDE RFPFQASVEF VFSSSPEKIK GSTPRNDPSV SVDYNTTEPA VRWDSYENFN QHHEDSVDGS LTHTRGPLDG SPYAQVQRPP RQTPPAPSPE PPPPPMLSVS SDSGHSSTLT TEPAAESPGR PPPTAAERQE LDRLLGGCGV ASGGRGAGRE TAILDDEEQP TVGGGPHLGV YPGHRPGLSR HCSCRQGYRE PCGVPNGGYY RPEGTLERRR LAYGGYEGSP QGYAEASMEK RRLCRSLSEG LYPYPPEMGK

PATGDFGYRA PGYREVVILE DPGLPALYPC PACEEKLALP TAALYGLRLE REAGEGWASE AGKPLLHPVR PGHPLPLLLP ACGHHHAPMP DYSCLKPPKA GEEGHEGCSY TMCPEGRYGH PGYPALVTYS YGGAVPSYCP AYGRVPHSCG SPGEGRGYPS PGAHSPRAGS ISPGSPPYPQ SRKLSYEIPT EEGGDRYPLP GHLASAGPLA SAESLEPVSW REGPSGHSTL PRSPRDAPCS ASSELSGPST PLHTSSPVQG KESTRRQDTR SPTSAPTQRL SPGEALPPVS QAGTGKAPEL PSGSGPEPLA PSPVSPTFPP SSPSDWPQER SPGGHSDGAS PRSPVPTTLP GLRHAPWQGP RGPPDSPDGS PLTPVPSQMP WLVASPEPPQ SSPTPAFPLA ASYDTNGLSQ PPLPEKRHLP GPGQQPGPWG PEQASSPARG ISHHVTFAPL LSDNVPQTPE PPTQESQSNV KFVQDTSKFW YKPHLSRDQA IALLKDKDPG AFLIRDSHSF QGAYGLALKV ATPPPSAQPW KGDPVEQLVR HFLIETGPKG VKIKGCPSEP YFGSLSALVS QHSISPISLP CCLRIPSKDP LEETPEAPVP TNMSTAADLL RQGAACSVLY LTSVETESLT GPQAVARASS AALSCSPRPT PAVVHFKVSA QGITLTDNQR KLFFRRHYPV NSITFSSTDP QDRRWTNPDG TTSKIFGFVA KKPGSPWENV CHLFAELDPD QPAGAIVTFI TKVLLGQRK

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

Product Details

	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

Target:	TENC1
Alternative Name:	TNS2 (TENC1 Products)
Background:	Tensin-2 (EC 3.1.3.48) (C1 domain-containing phosphatase and tensin homolog) (C1-TEN) (Tensin-like C1 domain-containing phosphatase),FUNCTION: Tyrosine-protein phosphatase which regulates cell motility, proliferation and muscle-response to insulin (PubMed:15817639, PubMed:23401856). Phosphatase activity is mediated by binding to phosphatidylinositol-3,4,5-triphosphate (PtdIns(3,4,5)P3) via the SH2 domain (PubMed:30092354). In muscles and under catabolic conditions, dephosphorylates IRS1 leading to its degradation and muscle atrophy (PubMed:23401856, PubMed:30092354). Negatively regulates PI3K-AKT pathway activation (PubMed:15817639, PubMed:23401856, PubMed:30092354). Dephosphorylates nephrin NPHS1 in podocytes which regulates activity of the mTORC1 complex (PubMed:28955049). Under normal glucose conditions, NPHS1 outcompetes IRS1 for binding to phosphatidylinositol 3-kinase (PI3K) which balances mTORC1 activity but high glucose conditions lead to up-regulation of TNS2, increased NPHS1 dephosphorylation and activation of mTORC1, contributing to podocyte hypertrophy and proteinuria (PubMed:28955049). Required for correct podocyte morphology, podocyte-glomerular basement membrane interaction and integrity of the glomerular filtration barrier (By similarity). Enhances RHOA activation in the presence of DLC1 (PubMed:26427649). Plays a role in promoting DLC1-dependent remodeling of the

Target Details

	extracellular matrix (PubMed:20069572). {ECO:0000250|UniProtKB:Q8CGB6, ECO:0000269|PubMed:15817639, ECO:0000269|PubMed:20069572, ECO:0000269|PubMed:23401856, ECO:0000269|PubMed:26427649, ECO:0000269|PubMed:28955049, ECO:0000269|PubMed:30092354}.
Molecular Weight:	152.6 kDa
UniProt:	Q63HR2

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