Datasheet for ABIN7555779

TENC1 Protein (AA 1-1409) (His tag)

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Overview

Quantity:	1 mg
Target:	TENC1
Protein Characteristics:	AA 1-1409
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This TENC1 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant TNS2 Protein expressed in mammalian cells.
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 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:	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 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:	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

