

Datasheet for ABIN7555816 **TPCN1 Protein (AA 1-816) (His tag)**



Overview

Quantity:	1 mg
Target:	TPCN1
Protein Characteristics:	AA 1-816
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This TPCN1 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant TPCN1 Protein expressed in mammalian cells.
Sequence:	MAVSLDDDVP LILTLDEGGS APLAPSNGLG QEELPSKNGG SYAIHDSQAP SLSSGGESSP
	SSPAHNWEMN YQEAAIYLQE GENNDKFFTH PKDAKALAAY LFAHNHLFYL MELATALLLL
	LLSLCEAPAV PALRLGIYVH ATLELFALMV VVFELCMKLR WLGLHTFIRH KRTMVKTSVL
	VVQFVEAIVV LVRQMSHVRV TRALRCIFLV DCRYCGGVRR NLRQIFQSLP PFMDILLLLL
	FFMIIFAILG FYLFSPNPSD PYFSTLENSI VSLFVLLTTA NFPDVMMPSY SRNPWSCVFF
	IVYLSIELYF IMNLLLAVVF DTFNDIEKRK FKSLLLHKRT AIQHAYRLLI SQRRPAGISY
	RQFEGLMRFY KPRMSARERY LTFKALNQNN TPLLSLKDFY DIYEVAALKW KAKKNREHWF
	DELPRTALLI FKGINILVKS KAFQYFMYLV VAVNGVWILV ETFMLKGGNF FSKHVPWSYL
	VFLTIYGVEL FLKVAGLGPV EYLSSGWNLF DFSVTVFAFL GLLALALNME PFYFIVVLRP
	LQLLRLFKLK ERYRNVLDTM FELLPRMASL GLTLLIFYYS FAIVGMEFFC GIVFPNCCNT
	STVADAYRWR NHTVGNRTVV EEGYYYLNNF DNILNSFVTL FELTVVNNWY IIMEGVTSQT
	SHWSRLYFMT FYIVTMVVMT IIVAFILEAF VFRMNYSRKN QDSEVDGGIT LEKEISKEEL

	VAVLELYREA RGASSDVTRL LETLSQMERY QQHSMVFLGR RSRTKSDLSL KMYQEEIQEW
	YEEHAREQEQ QRQLSSSAAP AAQQPPGSRQ RSQTVT 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:	TPCN1
Alternative Name:	TPCN1 (TPCN1 Products)
Background:	Two pore channel protein 1 (Two pore calcium channel protein 1) (Voltage-dependent calcium
	channel protein TPC1),FUNCTION: Intracellular channel initially characterized as a non-selective
	Ca(2+)-permeable channel activated by NAADP (nicotinic acid adenine dinucleotide phosphate)
	it is also a voltage-gated highly-selective Na(+) channel activated directly by PI(3,5)P2
	(phosphatidylinositol 3,5-bisphosphate) that senses pH changes and confers electrical
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excitability to organelles (PubMed:19620632, PubMed:23063126, PubMed:24776928,

PubMed:23394946). Localizes to the early and recycling endosomes membranes where it plays a role in the uptake and processing of proteins and regulates organellar membrane excitability, membrane trafficking and pH homeostasis (PubMed:23394946) (Probable). Ion selectivity is not fixed but rather agonist-dependent and under defined ionic conditions, can be readily activated by both NAADP and PI(3,5)P2 (Probable). Required for mTOR-dependent nutrient sensing (PubMed:23394946) (Probable). {ECO:0000269|PubMed:19620632, ECO:0000269|PubMed:23063126, ECO:0000269|PubMed:23394946, ECO:0000269|PubMed:24776928, ECO:0000305|PubMed:32679067}., FUNCTION: (Microbial infection) During Ebola virus (EBOV) infection, controls the movement of endosomes containing virus particles and is required by EBOV to escape from the endosomal network into the cell cytoplasm. {ECO:0000269|PubMed:25722412}.

Molecular Weight:

94.1 kDa

UniProt:

Q9ULQ1

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