Datasheet for ABIN3129789

TPCN1 Protein (AA 1-817) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	TPCN1
Protein Characteristics:	AA 1-817
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This TPCN1 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), ELISA, SDS-PAGE (SDS)

Product Details

Brand:	AliCE®
Sequence:	MAVSLDDDVP LILTLDEAES APLPPSNSLG QEQLPSKNGG SHSIHNSQVP SLVSGADSPP SSPTGHNWEM NYQEAAIYLQ EGQNNDKFFT HPKDARALAA YLFVHNHFFY MMELLTALLL LLLSLCESPA VPVLKLHTYV HATLELFALM VVVFELCMKL RWLGFHTFVR HKRTMVKTSV LVVQFIEAIV VLVRQTSHVR VTRALRCIFL VDCRYCGGVR RNLRQIFQSL PPFMDILLLL LFFMIIFAIL GFYLFSTNPS DPYFSTLENS IVNLFVLLTT ANFPDVMMPS YSRNPWSCVF FIVYLSIELY FIMNLLLAVV FDTFNDIEKH KFKSLLLHKR TAIQHAYGLL ASQRRPAGIS YRQFEGLMRF YKPRMSARER FLTFKALNQS NTPLLSLKDF YDIYEVAALQ WKAKRNRQHW FDELPRTAFL IFKGINILVN SKAFQYFMYL VVAVNGVWIL VETFMLKGGN FTSKHVPWSY LVFLTIYGVE LFMKVAGLGP VEYLSSGWNL FDFSVTAFAF LGLLALTLNM EPFYFIVVLR PLQLLRLFKL KKRYRNVLDT MFELLPRMAS LGLTLLTFYY SFAIVGMEFF NGRLTPNCCN TSTVADAYRF INHTVGNKTK VEEGYYYLNN FDNILNSFVT LFELTVVNNW YIIMEGVTSQ TSHWSRLYFM

	TFYIVTMVVM TIIVAFILEA FVFRMNYSRK SQDSEVDSGI VIEKEMSKEE LMAVLELYRE ERGTSSDVTR LLDTLSQMEK YQQNSMVFLG RRSRTKSDLS LKMYQEEIQE WYEEHAREQE QQKLRGSVPG PAAQQPPGSR QRSQTVT **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 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

Product Details

	System (AliCE®).
Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).
Grade:	custom-made

Target Details

Target:	TPCN1
Alternative Name:	Tpcn1 (TPCN1 Products)
Background:	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 excitability to organelles (PubMed:24776928, PubMed:23394946, PubMed:23063126). 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:28855648). 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 (By similarity). Required for mTOR-dependent nutrient sensing (PubMed:23394946). {ECO:0000250|UniProtKB:Q8NHX9, ECO:0000269|PubMed:23063126, ECO:0000269|PubMed:23394946, ECO:0000269|PubMed:24776928, ECO:0000269|PubMed:28855648}.
Molecular Weight:	94.5 kDa
UniProt:	Q9EQJ0

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.

Application Details

	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