Datasheet for ABIN3124665

CPT1C Protein (AA 1-798) (Strep Tag)

Go to Product page

Overview

Quantity:	250 µg
Target:	CPT1C
Protein Characteristics:	AA 1-798
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This CPT1C protein is labelled with Strep Tag.
Application:	SDS-PAGE (SDS), ELISA, Western Blotting (WB)

Product Details

Brand:	AliCE®
Sequence:	MAEAHQASSL LSSLSSDGAE VELSSPVWQE IYLCALRSWK RHLWRVWNDF LAGVVPATPL SWLFLFSTIQ LACLLQLDPS LGLMEKIKEL LPDWGGQHHQ LQGFLSAAVF ASCLWGALIF TLHVALRLLL SHHGWLLEPH GAMSSPTKTW LALVRIFSGR HPRLFSFQRA LPRQPVPSAQ ETVRKYLESV RPVLGDDAFD RATALANDFL RLHAPRLQLY LQLKSWCTSN YVSDWWEEFV YLRSRGSLIN STYYMMDFLY VTPTPLQAAR AGNAVHTLLL YRHLLNRQEI SPTLLMGMRP LCSAQYERMF NTTRIPGVEK DHLRHLQDSR HVAVFHRGRF FRVGTHSPNG LLSPRALEQQ FQDILDDPSP ACPLEEHLAA LTAAPRSMWA QVRESVKTHA ATALEAVEGA AFFVSLDSEP AGLTREDPAA SLDAYAHALL AGRGHDRWFD KSFTLIVFSN GKLGLSVEHS WADCPVSGHL WEFTLATECF QLGYATDGHC KGHPDPTLPQ PQRLQWDLPE QIQPSISLAL RGAKTLSGNI DCHVFPFSHF GKSFIKCCHV SSDSFIQLVL QLAHFRDRGQ FCLTYESAMT RLFLEGRTET VRSCTREACQ FVRAMDNKET DQHCLALFRV AVDKHQALLK AAMSGQGIDR HLFALYIMSR

	LLHMQSPFLT QVQSQQWLLS TSQVPVQQTH LIDVHNYPDY VSSGGGFGPA HDHGYGISYI FMGENAITFH ISSKKSSTET DSHRLGQHIE NALLDVASLF RVGQHFKRQF RGENSDYRYN FLSCKTVDPN TPTSSTNL **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:	CPT1C
Alternative Name:	Cpt1c (CPT1C Products)
Background:	Palmitoyl thioesterase CPT1C (EC 3.1.2.22) (Carnitine O-palmitoyltransferase 1, brain isoform) (CPTI-B) (Carnitine palmitoyltransferase 1C) (Carnitine palmitoyltransferase I) (CPT I-C),FUNCTION: Palmitoyl thioesterase specifically expressed in the endoplasmic reticulum of neurons. Modulates the trafficking of the glutamate receptor, AMPAR, to plasma membrane through depalmitoylation of GRIA1 (By similarity). Also regulates AMPR trafficking through the regulation of SACM1L phosphatidylinositol-3-phosphatase activity by interaction in a malonyl-CoA dependent manner (PubMed:32931550). Binds malonyl-CoA and couples malonyl-CoA to ceramide levels, necessary for proper spine maturation and contributing to systemic energy homeostasis and appetite control (PubMed:16651524, PubMed:22539351, PubMed:37309891). Binds to palmitoyl-CoA, but does not have carnitine palmitoyltransferase 1 catalytic activity or at very low levels (PubMed:12376098, PubMed:25751282, PubMed:30135643). {ECO:0000250|UniProtKB:Q8TCG5, ECO:0000269|PubMed:12376098, ECO:0000269|PubMed:16651524, ECO:0000269|PubMed:22539351, ECO:0000269|PubMed:25751282, ECO:0000269|PubMed:30135643, ECO:0000269|PubMed:32931550, ECO:0000269|PubMed:37309891}.
Molecular Weight:	90.0 kDa
UniProt:	Q8BGD5
Pathways:	AMPK Signaling, Monocarboxylic Acid Catabolic Process

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

Application Details

	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