Datasheet for ABIN3085620

PDE1C Protein (AA 1-709) (Strep Tag)

Go to Product page

Overview

Quantity:	250 µg
Target:	PDE1C
Protein Characteristics:	AA 1-709
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This PDE1C protein is labelled with Strep Tag.
Application:	Western Blotting (WB), ELISA, SDS-PAGE (SDS)

Product Details

Brand:	AliCE®
Sequence:	MESPTKEIEE FESNSLKYLQ PEQIEKIWLR LRGLRKYKKT SQRLRSLVKQ LERGEASVVD LKKNLEYAAT VLESVYIDET RRLLDTEDEL SDIQSDAVPS EVRDWLASTF TRQMGMMLRR SDEKPRFKSI VHAVQAGIFV ERMYRRTSNM VGLSYPPAVI EALKDVDKWS FDVFSLNEAS GDHALKFIFY ELLTRYDLIS RFKIPISALV SFVEALEVGY SKHKNPYHNL MHAADVTQTV HYLLYKTGVA NWLTELEIFA IIFSAAIHDY EHTGTTNNFH IQTRSDPAIL YNDRSVLENH HLSAAYRLLQ DDEEMNILIN LSKDDWREFR TLVIEMVMAT DMSCHFQQIK AMKTALQQPE AIEKPKALSL MLHTADISHP AKAWDLHHRW TMSLLEEFFR QGDREAELGL PFSPLCDRKS TMVAQSQVGF IDFIVEPTFT VLTDMTEKIV SPLIDETSQT GGTGQRRSSL NSISSSDAKR SGVKTSGSEG SAPINNSVIS VDYKSFKATW TEVVHINRER WRAKVPKEEK AKKEAEEKAR LAAEEQQKEM EAKSQAEEGA SGKAEKKTSG ETKNQVNGTR ANKSDNPRGK NSKAEKSSGE QQQNGDFKDG KNKTDKKDHS NIGNDSKKTD GTKQRSHGSP APSTSSTCRL TLPVIKPPLR

	HFKRPAYASS SYAPSVSKKT DEHPARYKML DQRIKMKKIQ NISHNWNRK **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 System (AliCE®).

Product Details

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

Target Details

Target:	PDE1C
Alternative Name:	PDE1C (PDE1C Products)
Background:	Dual specificity calcium/calmodulin-dependent 3',5'-cyclic nucleotide phosphodiesterase 1C (Cam-PDE 1C) (EC 3.1.4.17) (Hcam3),FUNCTION: Calmodulin-dependent cyclic nucleotide phosphodiesterase with a dual specificity for the second messengers cAMP and cGMP, which are key regulators of many important physiological processes (PubMed:8557689, PubMed:29860631). Has a high affinity for both cAMP and cGMP (PubMed:8557689). Modulates the amplitude and duration of the cAMP signal in sensory cilia in response to odorant stimulation, hence contributing to the generation of action potentials. Regulates smooth muscle cell proliferation. Regulates the stability of growth factor receptors, including PDGFRB (Probable). {ECO:0000269|PubMed:29860631, ECO:0000269|PubMed:8557689, ECO:0000305|PubMed:29860631}.
Molecular Weight:	80.8 kDa
UniProt:	Q14123
Pathways:	EGFR Signaling Pathway, Neurotrophin Signaling Pathway, Negative Regulation of Hormone Secretion, cAMP Metabolic Process, G-protein mediated Events, Interaction of EGFR with phospholipase C-gamma

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

Application 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!
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