Datasheet for ABIN3119051

HCN2 Protein (AA 1-889) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	HCN2
Protein Characteristics:	AA 1-889
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This HCN2 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Brand:	AliCE®
Sequence:	MDARGGGGRP GESPGATPAP GPPPPPPPAP PQQQPPPPPP PAPPPGPGPA PPQHPPRAEA LPPEAADEGG PRGRLRSRDS SCGRPGTPGA ASTAKGSPNG ECGRGEPQCS PAGPEGPARG PKVSFSCRGA ASGPAPGPGP AEEAGSEEAG PAGEPRGSQA SFMQRQFGAL LQPGVNKFSL RMFGSQKAVE REQERVKSAG AWIIHPYSDF RFYWDFTMLL FMVGNLIIIP VGITFFKDET TAPWIVFNVV SDTFFLMDLV LNFRTGIVIE DNTEIILDPE KIKKKYLRTW FVVDFVSSIP VDYIFLIVEK GIDSEVYKTA RALRIVRFTK ILSLLRLLRL SRLIRYIHQW EEIFHMTYDL ASAVMRICNL ISMMLLLCHW DGCLQFLVPM LQDFPRNCWV SINGMVNHSW SELYSFALFK AMSHMLCIGY GRQAPESMTD IWLTMLSMIV GATCYAMFIG HATALIQSLD SSRRQYQEKY KQVEQYMSFH KLPADFRQKI HDYYEHRYQG KMFDEDSILG ELNGPLREEI VNFNCRKLVA SMPLFANADP NFVTAMLTKL KFEVFQPGDY IIREGTIGKK MYFIQHGVVS VLTKGNKEMK LSDGSYFGEI CLLTRGRRTA SVRADTYCRL YSLSVDNFNE VLEEYPMMRR AFETVAIDRL DRIGKKNSIL

LHKVQHDLNS GVFNNQENAI IQEIVKYDRE MVQQAELGQR VGLFPPPPPP PQVTSAIATL QQAAAMSFCP QVARPLVGPL ALGSPRLVRR PPPGPAPAAA SPGPPPPASP PGAPASPRAP RTSPYGGLPA APLAGPALPA RRLSRASRPL SASQPSLPHG APGPAASTRP ASSSTPRLGP TPAARAAAPS PDRRDSASPG AAGGLDPQDS ARSRLSSNL

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.

Product Details

Purification:	One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (AliCE®).
Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).
Grade:	custom-made

Target Details

Target:	HCN2
Alternative Name:	HCN2 (HCN2 Products)
Background:	Potassium/sodium hyperpolarization-activated cyclic nucleotide-gated channel 2 (Brain cyclic nucleotide-gated channel 2) (BCNG-2),FUNCTION: Hyperpolarization-activated ion channel exhibiting weak selectivity for potassium over sodium ions. Contributes to the native pacemaker currents in heart (If) and in neurons (Ih). Can also transport ammonium in the distal nephron. Produces a large instantaneous current. Modulated by intracellular chloride ions and pH , acidic pH shifts the activation to more negative voltages (By similarity). {ECO:0000250, ECO:0000269|PubMed:10228147, ECO:0000269|PubMed:10524219}.
Molecular Weight:	97.0 kDa
UniProt:	Q9UL51

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 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!

Application Details

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