Datasheet for ABIN3119376

HCN4 Protein (AA 1-1203) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	HCN4
Protein Characteristics:	AA 1-1203
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This HCN4 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Brand:	AliCE®
Sequence:	MDKLPPSMRK RLYSLPQQVG AKAWIMDEEE DAEEEGAGGR QDPSRRSIRL RPLPSPSPSA AAGGTESRSS ALGAADSEGP ARGAGKSSTN GDCRRFRGSL ASLGSRGGGS GGTGSGSSHG HLHDSAEERR LIAEGDASPG EDRTPPGLAA EPERPGASAQ PAASPPPPQQ PPQPASASCE QPSVDTAIKV EGGAAAGDQI LPEAEVRLGQ AGFMQRQFGA MLQPGVNKFS LRMFGSQKAV EREQERVKSA GFWIIHPYSD FRFYWDLTML LLMVGNLIII PVGITFFKDE NTTPWIVFNV VSDTFFLIDL VLNFRTGIVV EDNTEIILDP QRIKMKYLKS WFMVDFISSI PVDYIFLIVE TRIDSEVYKT ARALRIVRFT KILSLLRLLR LSRLIRYIHQ WEEIFHMTYD LASAVVRIVN LIGMMLLLCH WDGCLQFLVP MLQDFPDDCW VSINNMVNNS WGKQYSYALF KAMSHMLCIG YGRQAPVGMS DVWLTMLSMI VGATCYAMFI GHATALIQSL DSSRRQYQEK YKQVEQYMSF HKLPPDTRQR IHDYYEHRYQ GKMFDEESIL GELSEPLREE IINFNCRKLV ASMPLFANAD PNFVTSMLTK LRFEVFQPGD YIIREGTIGK KMYFIQHGVV SVLTKGNKET KLADGSYFGE ICLLTRGRRT

ASVRADTYCR LYSLSVDNFN EVLEEYPMMR RAFETVALDR LDRIGKKNSI LLHKVQHDLN SGVFNYQENE IIQQIVQHDR EMAHCAHRVQ AAASATPTPT PVIWTPLIQA PLQAAAATTS VAIALTHHPR LPAAIFRPPP GSGLGNLGAG QTPRHLKRLQ SLIPSALGSA SPASSPSQVD TPSSSSFHIQ QLAGFSAPAG LSPLLPSSSS SPPPGACGSP SAPTPSAGVA ATTIAGFGHF HKALGGSLSS SDSPLLTPLQ PGARSPQAAQ PSPAPPGARG GLGLPEHFLP PPPSSRSPSS SPGQLGQPPG ELSLGLATGP LSTPETPPRQ PEPPSLVAGA SGGASPVGFT PRGGLSPPGH SPGPPRTFPS APPRASGSHG SLLLPPASSP PPPQVPQRRG TPPLTPGRLT QDLKLISASQ PALPQDGAQT LRRASPHSSG ESMAAFPLFP RAGGGSGGSG SSGGLGPPGR PYGAIPGQHV TLPRKTSSGS LPPPLSLFGA RATSSGGPPL TAGPQREPGA RPEPVRSKLP SNL

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!

Product Details

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

Target Details

Target:	HCN4
Alternative Name:	HCN4 (HCN4 Products)
Background:	Potassium/sodium hyperpolarization-activated cyclic nucleotide-gated channel 4,FUNCTION: Hyperpolarization-activated ion channel with very slow activation and inactivation exhibiting weak selectivity for potassium over sodium ions. Contributes to the native pacemaker currents in heart (If) that regulate the rhythm of heart beat. May contribute to the native pacemaker currents in neurons (Ih). May mediate responses to sour stimuli. {ECO:0000269|PubMed:10228147, ECO:0000269|PubMed:10430953, ECO:0000269|PubMed:16407510, ECO:0000269|PubMed:19165230, ECO:0000269|PubMed:20829353}.
Molecular Weight:	129.0 kDa
UniProt:	Q9Y3Q4

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