Datasheet for ABIN3135268

KCNH1 Protein (AA 1-989) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	KCNH1
Protein Characteristics:	AA 1-989
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This KCNH1 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Brand:	AliCE®
Sequence:	MTMAGGRRGL VAPQNTFLEN IVRRSNDTNF VLGNAQIVDW PIVYSNDGFC KLSGYHRAEV MQKSSACSFM YGELTDKDTV EKVRQTFENY EMNSFEILMY KKNRTPVWFF VKIAPIRNEQ DKVVLFLCTF SDITAFKQPI EDDSCKGWGK FARLTRALTS SRGVLQQLAP SVQKGENVHK HSRLAEVLQL GSDILPQYKQ EAPKTPPHII LHYCVFKTTW DWIILILTFY TAILVPYNVS FKTRQNNVAW LVVDSIVDVI FLVDIVLNFH TTFVGPAGEV ISDPKLIRMN YLKTWFVIDL LSCLPYDVIN AFENVDEVSA FMGDPGKIGF ADQIPPPLEG RESQGISSLF SSLKVVRLLR LGRVARKLDH YIEYGAAVLV LLVCVFGLAA HWMACIWYSI GDYEIFDEDT KTIRNNSWLY QLALDIGTPY QFNGSGSGKW EGGPSKNSVY ISSLYFTMTS LTSVGFGNIA PSTDIEKIFA VAIMMIGSLL YATIFGNVTT IFQQMYANTN RYHEMLNSVR DFLKLYQVPK GLSERVMDYI VSTWSMSRGI DTEKVLQICP KDMRADICVH LNRKVFKEHP AFRLASDGCL RALAMEFQTV HCAPGDLIYH AGESVDSLCF VVSGSLEVIQ DDEVVAILGK GDVFGDVFWK EATLAQSCAN

VRALTYCDLH VIKRDALQKV LEFYTAFSHS FSRNLILTYN LRKRIVFRKI SDVKREEEER MKRKNEAPLI LPPDHPVRRL FQRFRQQKEA RLAAERGGRD LDDLDVEKGN ALTDHTSANH SLVKASVVTV RESPATPVSF QAATTSTVSD HAKLHAPGSE CLGPKAVSCD PAKRKGWARF KDACGKGEDW NKVSKAESME TLPERTKAPG EATLKKTDSC DSGITKSDLR LDNVGETRSP QDRSPILAEV KHSFYPIPEQ TLQATVLEVK YELKEDIKAL NAKMTSIEKQ LSEILRILMS RGSAQSPQET GEISRPQSPE SDRDIFGAS

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.

Product Details

- 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:	KCNH1
Alternative Name:	Kcnh1 (KCNH1 Products)
Background:	Potassium voltage-gated channel subfamily H member 1 (Ether-a-go-go potassium channel 1) (EAG channel 1) (EAG1) (m-eag) (Voltage-gated potassium channel subunit Kv10.1),FUNCTION: Pore-forming (alpha) subunit of a voltage-gated delayed rectifier potassium channel (PubMed:19671703, PubMed:23975098). Channel properties are modulated by subunit assembly. Mediates IK(NI) current in myoblasts. Involved in the regulation of cell proliferation and differentiation, in particular adipogenic and osteogenic differentiation in bone marrow-derived mesenchymal stem cells (MSCs) (By similarity). {ECO:0000250|UniProtKB:O95259, ECO:0000269|PubMed:19671703, ECO:0000269|PubMed:23975098}.
Molecular Weight:	111.3 kDa
UniProt:	Q60603

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

Application Details

	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