Datasheet for ABIN3134703

KCNK2 Protein (AA 1-426) (Strep Tag)

Go to Product page

Overview

Quantity:	250 µg
Target:	KCNK2
Protein Characteristics:	AA 1-426
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This KCNK2 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Brand:	AliCE®
Sequence:	MLASASRERP GYTAGVAAPD LLDPKSAAQN SKPRLSFSSK PTVLASRVES DSAINVMKWK TVSTIFLVVV LYLIIGATVF KALEQPQEIS QRTTIVIQKQ TFIAQHACVN STELDELIQQ IVAAINAGII PLGNSSNQVS HWDLGSSFFF AGTVITTIGF GNISPRTEGG KIFCIIYALL GIPLFGFLLA GVGDQLGTIF GKGIAKVEDT FIKWNVSQTK IRIISTIIFI LFGCVLFVAL PAVIFKHIEG WSALDAIYFV VITLTTIGFG DYVAGGSDIE YLDFYKPVVW FWILVGLAYF AAVLSMIGDW LRVISKKTKE EVGEFRAHAA EWTANVTAEF KETRRRLSVE IYDKFQRATS VKRKLSAELA GNHNQELTPC RRTLSVNHLT SEREVLPPLL KAESIYLNGL TPHCAGEDIA VIENMK **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:

Product Details

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

Target Details

Target:	KCNK2

Target Details

Alternative Name:	Kcnk2 (KCNK2 Products)
Background:	Potassium channel subfamily K member 2 (Outward rectifying potassium channel protein TREK-1) (TREK-1 K(+) channel subunit) (Two pore potassium channel TPKC1),FUNCTION: Ion channel that contributes to passive transmembrane potassium transport. Reversibly converts between a voltage-insensitive potassium leak channel and a voltage-dependent outward rectifying potassium channel in a phosphorylation-dependent manner. In astrocytes, forms mostly heterodimeric potassium channels with KCNK1, with only a minor proportion of functional channels containing homodimeric KCNK2 (PubMed:24496152). In astrocytes, the heterodimer formed by KCNK1 and KCNK2 is required for rapid glutamate release in response to activation of G-protein coupled receptors, such as F2R and CNR1 (PubMed:24496152). {ECO:0000269|PubMed:10321245, ECO:0000269|PubMed:16636285, ECO:0000269|PubMed:24496152, ECO:0000269|PubMed:9003761}.
Molecular Weight:	46.8 kDa
UniProt:	P97438

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!
Restrictions:	For Research Use only

Handling

Format:	Liquid

Handling

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