antibodies -online.com





Go to Product page

Datasheet for ABIN3082283

KCNK2 Protein (AA 309-426) (His tag)

Overview Quantity: 1 mg KCNK2 Target: Protein Characteristics: AA 309-426 Origin: Human Source: Escherichia coli (E. coli) Recombinant Protein Type: Purification tag / Conjugate: This KCNK2 protein is labelled with His tag. Application: ELISA, SDS-PAGE (SDS), Western Blotting (WB), Crystallization (Crys) **Product Details** DWLRVISKKT KEEVGEFRAH AAEWTANVTA EFKETRRRLS VEIYDKFORA TSIKRKLSAE Sequence: LAGNHNQELT PCRRTLSVNH LTSERDVLPP LLKTESIYLN GLTPHCAGEE IAVIENIK Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us. Characteristics: • Made in Germany - from design to production - by highly experienced protein experts. · Human KCNK2 Protein (raised in E. Coli) purified by multi-step, protein-specific process to ensure crystallization grade. • 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 will ensure that you receive a correctly folded 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.

specific reference buffer.

In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization).

When you order this made-to-order protein you will only pay upon receival of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered. The concentration of our recombinant proteins is measured using the absorbance at 280nm. The protein's absorbance will be measured in several dilutions and is measured against its

The concentration of the protein is calculated using its specific absorption coefficient. We use the Expasy's protparam tool to determine the absorption coefficient of each protein.

Purification:

Two step purification of proteins expressed in bacterial culture:

- 1. In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. Eluate fractions are analyzed by SDS-PAGE.
- 2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.

Purity:

>95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.

Sterility:

0.22 µm filtered

Endotoxin Level:

Endotoxin has not been removed. Please contact us if you require endotoxin removal.

Grade:

Crystallography grade

Target Details

Target:	KCNK2
Alternative Name:	KCNK2 (KCNK2 Products)
Background:	Ion channel that contributes to passive transmembrane potassium transport
	(PubMed:23169818). Reversibly converts between a voltage-insensitive potassium leak channel
	and a voltage-dependent outward rectifying potassium channel in a phosphorylation-dependent
	manner (PubMed:11319556). In astrocytes, forms mostly heterodimeric potassium channels
	with KCNK1, with only a minor proportion of functional channels containing homodimeric

Target Details

KCNK2. 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 (By similarity). {ECO:0000250|UniProtKB:P97438, ECO:0000269|PubMed:10784345, ECO:0000269|PubMed:11319556, ECO:0000269|PubMed:23169818}., Isoform 4: Does not display channel activity but reduces the channel activity of isoform 1 and isoform 2 and reduces cell surface expression of isoform 2. {ECO:0000250}.

Molecular Weight:

14.5 kDa Including tag.

UniProt:

095069

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: In cases in which it is highly likely that the recombinant protein with the default tag will be

insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to

increase solubility. We will discuss all possible options with you in detail to assure that you

receive your protein of interest.

Restrictions:

For Research Use only

Handling

Format:	Liquid
Buffer:	100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.

Expiry Date:

Unlimited (if stored properly)