

Datasheet for ABIN3114774

## KCNC3 Protein (AA 1-757) (Strep Tag)



[Go to Product page](#)

### Overview

Quantity:	250 µg
Target:	KCNC3
Protein Characteristics:	AA 1-757
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This KCNC3 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

### Product Details

Brand:	AlICE®
Sequence:	<p>MLSSVCVSSF RGRQGASKQQ PAPPPQPPEP PPPPLPPQQ QQPAQGPAA SPAGPPAPRG</p> <p>PGDRRAEPCP GLPAAAMGRH GGGGGDSGKI VINVGGVRHE TYRSTLRTLP GTRLAGLTEP</p> <p>EAAARFDYDP GADEFFFDRLH PGVFAYVLNY YRTGKLHCPA DVCGLFEEE LGFWGIDETD</p> <p>VEACCWMTYR QHRDAEEALD SFEAPDPAGA ANAANAAGAH DGGLDDEAGA GGGGLDGAGG</p> <p>ELKRLCFQDA GGGAGGPPGG AGGAGGTWWR RWQPRVWALF EDPYSSRAAR YVAFASLFFI</p> <p>LISITTFCLE THEGFIHISN KTVTQASPIP GAPPENITNV EVETEPFLTY VEGVCVWF</p> <p>FEFLMRITFC PDKVEFLKSS LNIIDCVAIL PFYLEVGLSG LSSKAAKDVL GFLRVVRFVR</p> <p>ILRIFKLTRH FVGLRVLGHT LRASTNEFLI LIIFLALGVL IFATMIYYAE RIGADPDDIL GSNHTYFKNI</p> <p>PIGFWWAVVT MTTLGYGDMY PKTWSGMLVG ALCALAGVLT IAMPVPVIVN NFGMYYSLAM</p> <p>AKQKLPPKKK KHIPRPPQPG SPNYCKPDPP PPPPPHPPHG SGGISPPPI TPSPMGVTVA</p> <p>GAYPAGPHTH PGLLRGGAGG LGIMGLPLP APGEPCPLAQ EEVIEINRAD PRPNGDPAAA</p>

ALAHEDCPAI DQPAMSPEDK SPITPGSRGR YSRDRACFLL TDYAPSPDGS IRKATGAPPL  
PPQDWRKPGP PSFLPDLNAN AAAWISP

**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.

### Purification:

One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®).

---

## Product Details

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

Grade: custom-made

## Target Details

Target: KCNC3

Alternative Name: KCNC3 ([KCNC3 Products](#))

Background: Potassium voltage-gated channel subfamily C member 3 (KSHIID) (Voltage-gated potassium channel subunit Kv3.3),FUNCTION: Voltage-gated potassium channel that plays an important role in the rapid repolarization of fast-firing brain neurons. The channel opens in response to the voltage difference across the membrane, forming a potassium-selective channel through which potassium ions pass in accordance with their electrochemical gradient. The channel displays rapid activation and inactivation kinetics (PubMed:10712820, PubMed:26997484, PubMed:22289912, PubMed:23734863, PubMed:16501573, PubMed:19953606, PubMed:21479265, PubMed:25756792). It plays a role in the regulation of the frequency, shape and duration of action potentials in Purkinje cells. Required for normal survival of cerebellar neurons, probably via its role in regulating the duration and frequency of action potentials that in turn regulate the activity of voltage-gated Ca(2+) channels and cellular Ca(2+) homeostasis (By similarity). Required for normal motor function (PubMed:23734863, PubMed:16501573, PubMed:19953606, PubMed:21479265, PubMed:25756792). Plays a role in the reorganization of the cortical actin cytoskeleton and the formation of actin veil structures in neuronal growth cones via its interaction with HAX1 and the Arp2/3 complex (PubMed:26997484). {ECO:0000250|UniProtKB:Q63959, ECO:0000269|PubMed:10712820, ECO:0000269|PubMed:16501573, ECO:0000269|PubMed:19953606, ECO:0000269|PubMed:21479265, ECO:0000269|PubMed:22289912, ECO:0000269|PubMed:23734863, ECO:0000269|PubMed:25756792, ECO:0000269|PubMed:26997484}.

Molecular Weight: 80.6 kDa

UniProt: [Q14003](#)

## 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.

## Application Details

---

Comment:	<p>ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from <i>Nicotiana tabacum</i> 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.</p> <p>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!</p>
----------	--

Restrictions:	For Research Use only
---------------	-----------------------

## Handling

---

Format:	Liquid
Buffer:	<p>The buffer composition is at the discretion of the manufacturer.</p> <p>Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol <b>Might differ depending on protein.</b></p>
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months