

Datasheet for ABIN3115770

## KCNT2 Protein (AA 1-1135) (Strep Tag)



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### Overview

Quantity:	250 µg
Target:	KCNT2
Protein Characteristics:	AA 1-1135
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This KCNT2 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

### Product Details

Brand:	AliCE®
Sequence:	<p>MVDLESEVPP LPPRYRFRDL LLGDQGWQND DRVQVEFYMN ENTFKERLKL FFIKNQRSSL</p> <p>RIRLFNFSLK LLSCLLYIIR VLENPSQGN EWSHIFWVNR SLPLWGLQVS VALISLFETI</p> <p>LLGYLSYKGN IWEQILRIPF ILEIINAVPF IISIFWPSLR NLFVPVFLNC WLAKHALENM INDLHRAIQR</p> <p>TQSAMFNQVL ILISTLLCLI FTCICGIQHL ERIGKKLNLF DSLYFCIVTF STVGFGDVTP</p> <p>ETWSSKLFVW AMICVALVVL PIQFEQLAYL WMERQKSGGN YSRHRAQTEK HVVLCVSSLK</p> <p>IDLLMDFLNE FYAHPRLQDY YVVILCPTM DVQVRRVLQI PMWSQRVIYL QGSALKDQDL</p> <p>LRAKMDDAEA CFILSSRCEV DRTSSDHQTI LRAWAVKDFA PNCPLYVQIL KPENKFHIKF</p> <p>ADHVVCSEEF KYAMLALNCI CPATSTLITL LVHTSRGQEG QQSPEQWQKM YGRCSGNEVY</p> <p>HIVLEESTFF AEYEGKSFTY ASFHAHKKFG VCLIGVRRED NKNILLNPGP RYIMNSTDIC</p> <p>FYINITKEEN SAFKNQDQQR KSNVSRSFYH GPSRLPVHSI IASMGTVAD LQDTSCRSAS</p> <p>GPTLSLPTEG SKEIRRPISIA PVLEVADTSS IQTCDLLSDQ SEDETPDEE MSSNLEYAKG</p>

YPPYSPYIGS SPTFCHLLHE KVPFCCLRLD KSCQHNYYED AKAYGFKNKL IIVAAETAGN  
GLYNFIVPLR AYYRPKKELN PIVLLLDNPP DMHFLDAICW FPMVYYMVGS IDNLDDLRLC  
GVTFAANMVV VDKESTMSAE EDYMADAKTI VNVQTLFRLF SSLSIITELT HPANMRFMQF  
RAKDCYSLAL SKLEKKERER GSNLAFMFRL PFAAGRVSFI SMLDTLLYQS FVKDYMIT  
RLLLGLDTTP GSGFLCSMKI TADDLWIRTY ARLYQKLCSS TGDVPIGIYR TESQKLTTSE  
SQISISVEEW EDTKDSKEQG HHRSNHRNST SSDQSDHPLL RRKSMQWARR LSRKGPKHSG  
KTAEKITQQR LNLRYRRSERQ ELAELVKNRM KHLGLSTVGY DEMNDHQSTL SYILINPSPD  
TRIELNDVVY LIRPDPLAYL PNSEPSRRNS ICNVTGQDSR EETQL

**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.**

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### 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:

## Product Details

- 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: KCNT2

Alternative Name: KCNT2 ([KCNT2 Products](#))

Background: Potassium channel subfamily T member 2 (Sequence like an intermediate conductance potassium channel subunit) (Sodium and chloride-activated ATP-sensitive potassium channel Slo2.1), FUNCTION: Outward rectifying potassium channel. Produces rapidly activating outward rectifier K(+) currents. Activated by high intracellular sodium and chloride levels (PubMed:14684870, PubMed:16687497, PubMed:29069600). Channel activity is inhibited by ATP and by inhalation anesthetics, such as isoflurane (PubMed:16687497) (By similarity). Inhibited upon stimulation of G-protein coupled receptors, such as CHRM1 and GRM1 (PubMed:16687497). {ECO:0000250|UniProtKB:Q6UVM4, ECO:0000269|PubMed:14684870, ECO:0000269|PubMed:16687497, ECO:0000269|PubMed:29069600}.

Molecular Weight: 130.5 kDa

UniProt: [Q6UVM3](#)

## 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 <b>Might differ depending on protein.</b>
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months