

# Datasheet for ABIN3115360

# KCNT1 Protein (AA 1-1230) (Strep Tag)



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Quantity:	250 μg
Target:	KCNT1
Protein Characteristics:	AA 1-1230
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This KCNT1 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Brand:	AliCE®
Sequence:	MARAKLPRSP SEGKAGPGGA PAGAAAPEEP HGLSPLLPAR GGGSVGSDVG QRLPVEDFSL
	DSSLSQVQVE FYVNENTFKE RLKLFFIKNQ RSSLRIRLFN FSLKLLTCLL YIVRVLLDDP
	ALGIGCWGCP KQNYSFNDSS SEINWAPILW VERKMTLWAI QVIVAIISFL ETMLLIYLSY
	KGNIWEQIFR VSFVLEMINT LPFIITIFWP PLRNLFIPVF LNCWLAKHAL ENMINDFHRA
	ILRTQSAMFN QVLILFCTLL CLVFTGTCGI QHLERAGENL SLLTSFYFCI VTFSTVGYGD
	VTPKIWPSQL LVVIMICVAL VVLPLQFEEL VYLWMERQKS GGNYSRHRAQ TEKHVVLCVS
	SLKIDLLMDF LNEFYAHPRL QDYYVVILCP TEMDVQVRRV LQIPLWSQRV IYLQGSALKD
	QDLMRAKMDN GEACFILSSR NEVDRTAADH QTILRAWAVK DFAPNCPLYV QILKPENKFH
	VKFADHVVCE EECKYAMLAL NCICPATSTL ITLLVHTSRG QEGQESPEQW QRMYGRCSGN
	EVYHIRMGDS KFFREYEGKS FTYAAFHAHK KYGVCLIGLK REDNKSILLN PGPRHILAAS
	DTCFYINITK EENSAFIFKQ EEKRKKRAFS GQGLHEGPAR LPVHSIIASM GTVAMDLQGT

EHRPTQSGGG GGGSKLALPT ENGSGSRRPS IAPVLELADS SALLPCDLLS DQSEDEVTPS
DDEGLSVVEY VKGYPPNSPY IGSSPTLCHL LPVKAPFCCL RLDKGCKHNS YEDAKAYGFK
NKLIIVSAET AGNGLYNFIV PLRAYYRSRK ELNPIVLLLD NKPDHHFLEA ICCFPMVYYM
EGSVDNLDSL LQCGIIYADN LVVVDKESTM SAEEDYMADA KTIVNVQTMF RLFPSLSITT
ELTHPSNMRF MQFRAKDSYS LALSKLEKRE RENGSNLAFM FRLPFAAGRV FSISMLDTLL
YQSFVKDYMI TITRLLLGLD TTPGSGYLCA MKITEGDLWI RTYGRLFQKL CSSSAEIPIG
IYRTESHVFS TSESQISVNV EDCEDTREVK GPWGSRAGTG GSSQGRHTGG GDPAEHPLLR
RKSLQWARRL SRKAPKQAGR AAAAEWISQQ RLSLYRRSER QELSELVKNR MKHLGLPTTG
YEDVANLTAS DVMNRVNLGY LQDEMNDHQN TLSYVLINPP PDTRLEPSDI VYLIRSDPLA
HVASSSQSRK SSCSHKLSSC NPETRDETQL

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 posttranslational 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:

KCNT1

- 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:

Alternative Name:	KCNT1 (KCNT1 Products)
Background:	Potassium channel subfamily T member 1 (KCa4.1),FUNCTION: Outwardly rectifying potassium channel subunit that may coassemble with other Slo-type channel subunits. Activated by high intracellular sodium or chloride levels. Activated upon stimulation of G-protein coupled receptors, such as CHRM1 and GRIA1. May be regulated by calcium in the absence of sodium ions (in vitro) (By similarity). {ECO:0000250}.
Molecular Weight:	138.3 kDa
UniProt:	Q5JUK3

## **Application Details**

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
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	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