

# Datasheet for ABIN3121107

# KCNJ13 Protein (AA 1-360) (Strep Tag)



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Quantity:	250 μg
Target:	KCNJ13
Protein Characteristics:	AA 1-360
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This KCNJ13 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details	
Brand:	AliCE®
Sequence:	MDSSNCKVNA PLLSQRHRRM VTKDGHSTLQ MDGAQRGLVY LRDAWGILMD MRWRWMMLVF
	SASFVVHWLV FAVLWYAVAE MNGDLEIDHD VPPENHTICV KHITSFTAAF SFSLETQLTI
	GYGTMFPSGD CPSAIALLAI QMLLGLMLEA FITGAFVAKI ARPKNRAFSI RFTDLAVVAH
	KDGKPNLIFQ VANTRPSPLT NVRVSAVLYQ ERENGELYQT SVDFHLDGIS SEECPFFIFP
	LTYYHTISPS SPLATLLQHE TPPHFELVVF LSAMQEGTGE ICQRRTSYLP SEIMLHHRFA
	ALMTRGSKGE YQVKMENFDK TVPEHPTPVV SKSPHRTDLD IHINGQSIDN FQIAETGLTE
	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:

- 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:	KCNJ13

# Target Details

Alternative Name:	Kcnj13 (KCNJ13 Products)
Background:	Inward rectifier potassium channel 13 (Inward rectifier K(+) channel Kir7.1) (Potassium channel inwardly rectifying subfamily J member 13),FUNCTION: Inward rectifier potassium channels are characterized by a greater tendency to allow potassium to flow into the cell rather than out of it. Their voltage dependence is regulated by the concentration of extracellular potassium, as external potassium is raised, the voltage range of the channel opening shifts to more positive voltages. The inward rectification is mainly due to the blockage of outward current by internal magnesium. KCNJ13 has a very low single channel conductance, low sensitivity to block by external barium and cesium, and no dependence of its inward rectification properties on the internal blocking particle magnesium (By similarity). {ECO:0000250}.
Molecular Weight:	40.6 kDa
UniProt:	P86046
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
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

Handling Advice:	Avoid repeated freeze-thaw cycles.	
Storage:	-80 °C	
Storage Comment:	Store at -80°C.	
Expiry Date:	12 months	