

### Datasheet for ABIN3127192

# CACNG5 Protein (AA 1-275) (Strep Tag)



### Overview

Quantity:	250 μg
Target:	CACNG5
Protein Characteristics:	AA 1-275
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This CACNG5 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

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Product Details	
Brand:	AliCE®
Sequence:	MSACGRKALT LLSSVFAVCG LGLLGIAVST DYWLYLEEGI ILPQNQSTEV KMSLHSGLWR
	VCFLAGEERG RCFTIEYVMP MNSQMTSEST VNVLKMIRSA TPFPLVSLFF MFIGFILSNI
	GHIRPHRTIL AFVSGIFFIL SGLSLVVGLV LYISSINDEM LNRTKDAETY FNYKYGWSFA
	FAAISFLLTE SAGVMSVYLF MKRYTAEDMY RPHPGFYRPR LSNCSDYSGQ FLHPDAWIRG
	RSPSDISSDA SLQMNSNYPA LLKCPDYDQM SSSPC
	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.

Alternative Name:

- · 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:	CACNG5

Cacng5 (CACNG5 Products)

## **Target Details**

- Target Details		
Background:	Voltage-dependent calcium channel gamma-5 subunit (Neuronal voltage-gated calcium	
	channel gamma-5 subunit) (Transmembrane AMPAR regulatory protein gamma-5) (TARP	
	gamma-5),FUNCTION: Regulates the gating properties of AMPA-selective glutamate receptors	
	(AMPARs). Modulates their gating properties by accelerating their rates of activation,	
	deactivation and desensitization. Displays subunit-specific AMPA receptor regulation. Shows	
	specificity for GRIA1, GRIA4 and the long isoform of GRIA2. Thought to stabilize the calcium	
	channel in an inactivated (closed) state (By similarity). {ECO:0000250}.	
Molecular Weight:	30.9 kDa	
UniProt:	Q8VHW4	
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	
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	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	

# Handling

Storage Comment:	Store at -80°C.
Expiry Date:	12 months