

# Datasheet for ABIN3145973

# CACNG4 Protein (AA 208-327) (His tag)



# Overview

Quantity:	2 mg
Target:	CACNG4
Protein Characteristics:	AA 208-327
Origin:	Mouse
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	This CACNG4 protein is labelled with His tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB), Crystallization (Crys)
Product Details	
Sequence:	EKNKELRFKT KREFLKASSS SPYARMPSYR YRRRRSRSSS RSTEASPSRD ASPVGLKITG
	AIPMGELSMY TLSREPLKVT TAASYSPDQD AGFLQMHDFF QQDLKEGFHV SMLNRRTTPV
	Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a
	special request, please contact us.
	<ul> <li>Made in Germany - from design to production - by highly experienced protein experts.</li> <li>Mouse Cacng4 Protein (raised in E. Coli) purified by multi-step, protein-specific process to ensure crystallization grade.</li> <li>State-of-the-art algorithm used for plasmid design (Gene synthesis).</li> </ul>
	This protein is a made to order protein and will be made for the first time for your order. Our
	experts in the lab will ensure that you receive a correctly folded 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.

specific reference buffer.

In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization).

When you order this made-to-order protein you will only pay upon receival of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered. The concentration of our recombinant proteins is measured using the absorbance at 280nm. The protein's absorbance will be measured in several dilutions and is measured against its

The concentration of the protein is calculated using its specific absorption coefficient. We use the Expasy's protparam tool to determine the absorption coefficient of each protein.

### Purification:

Two step purification of proteins expressed in bacterial culture:

- 1. In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. Eluate fractions are analyzed by SDS-PAGE.
- 2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.

Purity:

>95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.

Sterility:

0.22 µm filtered

Endotoxin Level:

Endotoxin has not been removed. Please contact us if you require endotoxin removal.

Grade:

Crystallography grade

## **Target Details**

Target:	CACNG4
Alternative Name:	Cacng4 (CACNG4 Products)
Background:	Regulates the trafficking and gating properties of AMPA-selective glutamate receptors
	(AMPARs). Promotes their targeting to the cell membrane and synapses and modulates their
	gating properties by slowing their rates of activation, deactivation and desensitization and by
	mediating their resensitization. Does not show subunit-specific AMPA receptor regulation and
	regulates all AMPAR subunits. Thought to stabilize the calcium channel in an inactivated

Storage Comment:

Expiry Date:

Store at -80°C.

Unlimited (if stored properly)

Target Details	
	(closed) state. {ECO:0000269 PubMed:17880894}.
Molecular Weight:	14.7 kDa Including tag.
UniProt:	Q9JJV4
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 gurantee though.
Comment:	Protein has not been tested for activity yet. In cases in which it is highly likely that the recombinant protein with the default tag will be insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you receive your protein of interest.
Restrictions:	For Research Use only
Handling	
Format:	Liquid
Buffer:	100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C