

CACNG7 Antibody (C-term) Blocking Peptide

Synthetic peptide Catalog # BP9136b

Specification

CACNG7 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession P62955

CACNG7 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 59284

Other Names

Voltage-dependent calcium channel gamma-7 subunit, Neuronal voltage-gated calcium channel gamma-7 subunit, Transmembrane AMPAR regulatory protein gamma-7, TARP gamma-7, CACNG7

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP9136b was selected from the C-term region of human CACNG7. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

CACNG7 Antibody (C-term) Blocking Peptide - Protein Information

Name CACNG7

Function

Regulates the activity of L-type calcium channels that contain CACNA1C as pore-forming subunit (PubMed:21127204). 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. Displays subunit-specific AMPA receptor regulation. Shows specificity only for GRIA1 and GRIA2 (PubMed:21172611).

Cellular Location

Cell membrane; Multi-pass membrane protein



Tissue Location

Detected in heart left ventricle (PubMed:21127204). Widely expressed.

CACNG7 Antibody (C-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

• Blocking Peptides

CACNG7 Antibody (C-term) Blocking Peptide - Images

CACNG7 Antibody (C-term) Blocking Peptide - Background

The mouse protein stargazin is one of five subunits comprising neuronal voltage-gated calcium channels. It is thought to stabilize the calcium channel in an inactive (closed) state. Mutations in stargazin have been associated with absence seizures, also known as petit-mal or spike-wave seizures. CACNG7 is structurally similar to the mouse stargazin protein and is a member of the neuronal calcium channel gamma subunit protein family. It appears unlikely that CACNG7 is part of a functional calcium channel. Rather, it appears to inhibit the expression of a specific calcium channel subunit.

CACNG7 Antibody (C-term) Blocking Peptide - References

Wang Y., et.al., EMBO J. 25:5058-5070(2006). Moss F.J., et.al., EMBO J. 21:1514-1523(2002).