10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

CACNA2D2 Antibody (Center) Blocking peptide
Synthetic peptide
Catalog # BP13380c

Specification

CACNA2D2 Antibody (Center) Blocking peptide - Product Information

Primary Accession Q9NY47

CACNA2D2 Antibody (Center) Blocking peptide - Additional Information

Gene ID 9254

Other Names
Voltage-dependent calcium channel subunit alpha-2/delta-2, Voltage-gated calcium channel subunit alpha-2/delta-2, Voltage-dependent calcium channel subunit alpha-2-2, Voltage-dependent calcium channel subunit delta-2, CACNA2D2, KIAA0558

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP13380c was selected from the Center region of CACNA2D2. 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.

CACNA2D2 Antibody (Center) Blocking peptide - Protein Information

Name CACNA2D2

Synonyms KIAA0558

Function
The alpha-2/delta subunit of voltage-dependent calcium channels regulates calcium current density and activation/inactivation kinetics of the calcium channel. Acts as a regulatory subunit for P/Q- type calcium channel (CACNA1A), N-type (CACNA1B), L-type (CACNA1C OR CACNA1D) and possibly T-type (CACNA1G) (PubMed:15111129, PubMed:23339110). Overexpression induces apoptosis.

Cellular Location
Membrane; Single-pass type I membrane protein. Note=Colocalizes with CACNA1A in lipid raft

fractions.

Tissue Location
Predominantly present in cerebellar cortex. Present in various lung tumor cell lines, while it is absent in normal lung (at protein level). Highly expressed in heart, lung, testis, pancreas and skeletal muscle. Also expressed in kidney, liver, placenta and brain

CACNA2D2 Antibody (Center) Blocking peptide - Protocols

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

- Blocking Peptides

CACNA2D2 Antibody (Center) Blocking peptide - Images

CACNA2D2 Antibody (Center) Blocking peptide - Background

This gene encodes a member of the alpha-2/delta subunitfamily, a protein in the voltage-dependent calcium channel complex.Calcium channels mediate the influx of calcium ions into the cellupon membrane polarization and consist of a complex of alpha-1,alpha-2/delta, beta, and gamma subunits in a 1:1:1:1 ratio. Variousversions of each of these subunits exist, either expressed fromsimilar genes or the result of alternative splicing. Research on ahighly similar protein in rabbit suggests the protein described inthis record is cleaved into alpha-2 and delta subunits. Alternatetranscriptional splice variants of this gene, encoding differentisoforms, have been characterized.

CACNA2D2 Antibody (Center) Blocking peptide - References

Donato, R., et al. J. Neurosci. 26(48):12576-12586(2006)Ivanov, S.V., et al. Am. J. Pathol. 165(3):1007-1018(2004)Carboni, G.L., et al. Oncogene 22(4):615-626(2003)Honorio, S., et al. Mol. Cell. Probes 15(6):391-393(2001)Angeloni, D., et al. Mol. Cell. Probes 15(2):125-127(2001)