

Rabbit Anti-CACNA2 antibody

SL11981R

Product Name	CACNA2
Chinese Name	钙通道 L 型 $\alpha 2$ 多肽抗体
Alias	Calcium channel L type DHPR alpha 2 subunit; CA2D1_HUMAN; CACNA2; CACNA2D1; CACNL2A; Calcium channel L type alpha 2 polypeptide; Calcium channel voltage dependent alpha 2/delta subunit 1; CCHL2A; Dihydropyridine receptor alpha 2 subunit; Dihydropyridine sensitive L type calcium channel alpha 2/delta subunit; Dihydropyridine sensitive L type calcium channel subunits alpha 2/delta; H_DJ0560O14.1; L type calcium channel subunit alpha 2; MHS 3; MHS3; Voltage dependent calcium channel subunit alpha 2/delta 1; Voltage gated calcium channel subunit alpha 2/delta 1; Voltage-dependent calcium channel subunit delta-1; Voltage-gated calcium channel subunit alpha-2/delta-1; WUGSC:H_DJ0560O14.1.
Research Area	Cell biology Neurobiology Signal transduction Channel protein
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	(predicted: Human, Mouse, Rat, Dog, Pig, Cow, Horse,) ELISA=1:5000-10000
Applications	not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Theoretical molecular weight	16/106/122kDa
Cellular localization	The cell membrane
Form	Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human CACNA2/CACNA2D1: 571-610/1103 <Extracellular>
Lsotype	IgG
Purification	affinity purified by Protein A
Buffer Solution	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.

Storage

Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.

Attention

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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This gene encodes a member of the alpha-2/delta subunit family, a protein in the voltage-dependent calcium channel complex. Calcium channels mediate the influx of calcium ions into the cell upon membrane polarization and consist of a complex of alpha-1, alpha-2/delta, beta, and gamma subunits in a 1:1:1:1 ratio. Research on a highly similar protein in rabbit suggests the protein described in this record is cleaved into alpha-2 and delta subunits. Alternate transcriptional splice variants of this gene have been observed but have not been thoroughly characterized. [provided by RefSeq, Jul 2008]

Function:

The alpha-2/delta subunit of voltage-dependent calcium channels regulates calcium current density and activation/inactivation kinetics of the calcium channel. Plays an important role in excitation-contraction coupling.

Subunit:

Dimer formed of alpha-2-1 and delta-1 chains; disulfide-linked. Voltage-dependent calcium channels are multisubunit complexes, consisting of alpha-1 (CACNA1), alpha-2 (CACNA2D), beta (CACNB) and delta (CACNA2D) subunits in a 1:1:1:1 ratio

Product Detail

Subcellular Location:

Membrane; Single-pass type I membrane protein

Tissue Specificity:

Isoform 1 is expressed in skeletal muscle. Isoform 2 is expressed in the central nervous system. Isoform 2, isoform 4 and isoform 5 are expressed in neuroblastoma cells. Isoform 3, isoform 4 and isoform 5 are expressed in the aorta.

Post-translational modifications:

Proteolytically processed into subunits alpha-2-1 and delta-1 that are disulfide-linked.

Similarity:

Belongs to the calcium channel subunit alpha-2/delta family. Contains 1 cache domain. Contains 1 VWFA domain.

SWISS:
P54289

Gene ID:
781

Database links:

[Entrez Gene: 781](#) Human

[Entrez Gene: 12293](#) Mouse

[Entrez Gene: 397377](#) Pig

[Entrez Gene: 25399](#) Rat

[Omim: 114204](#) Human

[SwissProt: P54289](#) Human

[SwissProt: Q17R45](#) Human

[SwissProt: Q9UIU0](#) Human

[SwissProt: O08532](#) Mouse

[SwissProt: Q14BH8](#) Mouse

[SwissProt: Q3TQD0](#) Mouse

[SwissProt: Q8C6Y3](#) Mouse

[SwissProt: P13806](#) Rabbit

[SwissProt: P54290](#) Rat

[Unigene: 282151](#) Human

[Unigene: 159842](#) Mouse

[Unigene: 11276](#) Rat