



Rabbit Anti-CACNA1G + CACNA1H antibody

SL11984R

Product Name:	CACNA1G + CACNA1H
Chinese Name:	电压依赖性钙通道CACNA1G+CACNA1H抗体
Alias:	Cav3.1c; T-type Ca ⁺⁺ CP α 1H; Low voltage activated calcium channel alpha1 3.2 subunit; NBR13; Voltage dependent T type calcium channel subunit alpha 1G; Voltage dependent T type calcium channel subunit alpha 1H; Voltage gated calcium channel subunit alpha Cav3.1; Voltage gated calcium channel subunit alpha Cav3.2; CAC1G_HUMAN; CAC1H_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Cow,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	262kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human CACNA1G + CACNA1H:311-420/2377<Extracellular>
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Voltage-sensitive calcium channels (VSCC) mediate the entry of calcium ions into excitable cells and are also involved in a variety of calcium-dependent processes,

including muscle contraction, hormone or neurotransmitter release, gene expression, cell motility, cell division and cell death. The isoform alpha-1G gives rise to T-type calcium currents. T-type calcium channels belong to the "low-voltage activated (LVA)" group and are strongly blocked by mibefradil. A particularity of this type of channels is an opening at quite negative potentials and a voltage-dependent inactivation. T-type channels serve pacemaking functions in both central neurons and cardiac nodal cells and support calcium signaling in secretory cells and vascular smooth muscle. They may also be involved in the modulation of firing patterns of neurons which is important for information processing as well as in cell growth processes. There are 2 isoforms of CACNA1H and 14 isoforms of CACNA1G, produced by alternative splicing.

Function:

Voltage-sensitive calcium channels (VSCC) mediate the entry of calcium ions into excitable cells and are also involved in a variety of calcium-dependent processes, including muscle contraction, hormone or neurotransmitter release, gene expression, cell motility, cell division and cell death. The isoform alpha-1G gives rise to T-type calcium currents. T-type calcium channels belong to the 'low-voltage activated (LVA)' group and are strongly blocked by mibefradil. A particularity of this type of channels is an opening at quite negative potentials and a voltage-dependent inactivation. T-type channels serve pacemaking functions in both central neurons and cardiac nodal cells and support calcium signaling in secretory cells and vascular smooth muscle. They may also be involved in the modulation of firing patterns of neurons which is important for information processing as well as in cell growth processes.

Subcellular Location:

Membrane; Multi-pass membrane protein.

Tissue Specificity:

Highly expressed in brain, in particular in the amygdala, subthalamic nuclei, cerebellum and thalamus. Moderate expression in heart; low expression in placenta, kidney and lung. Also expressed in colon and bone marrow and in tumoral cells to a lesser extent. Highly expressed in fetal brain, but also in peripheral fetal tissues as heart, kidney and lung, suggesting a developmentally regulated expression.

Post-translational modifications:

In response to raising of intracellular calcium, the T-type channels are activated by CaM-kinase II.

Similarity:

Belongs to the calcium channel alpha-1 subunit (TC 1.A.1.11) family. CACNA1G subfamily.

SWISS:

O43497

Gene ID:

8913

Database links:

CACNA1G:

[Entrez Gene: 8913](#)Human

[Entrez Gene: 12291](#)Mouse

[Entrez Gene: 29717](#)Rat

[Omim: 604065](#)Human

[SwissProt: O43497](#)Human

[SwissProt: O54898](#)Rat

[Unigene: 29585](#)Mouse

[Unigene: 86960](#)Rat

CACNA1H:

[Entrez Gene: 8912](#)Human

[Omim: 607904](#)Human

[SwissProt: O95180](#)Human

[Unigene: 459642](#)Human

Important Note:

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