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CACNA1G Antibody (internal region)

Peptide-affinity purified goat antibody
Catalog # AF3026a

Specification

CACNA1G Antibody (internal region) - Product Information

Application	**E**
Primary Accession	O43497
Other Accession	NP_061496.2, NP_938192.1, NP_938194.1, NP_938198.1, NP_938199.1, NP_938200.1, NP_938407.1, 8913, 29717 (rat)
Predicted	**Human, Rat, Dog, Cow**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**0.5 mg/ml**
Isotype	**IgG**
Calculated MW	**262472**

CACNA1G Antibody (internal region) - Additional Information

Gene ID 8913

Other Names
Voltage-dependent T-type calcium channel subunit alpha-1G, Cav3.1c, NBR13, Voltage-gated calcium channel subunit alpha Cav3.1, CACNA1G, KIAA1123

Format
0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
CACNA1G Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

CACNA1G Antibody (internal region) - Protein Information

Name CACNA1G

Synonyms KIAA1123

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 channel 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.

Cellular Location
Cell membrane; Multi-pass membrane protein. Cytoplasm

Tissue Location
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

CACNA1G Antibody (internal region) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CACNA1G Antibody (internal region) - Images

CACNA1G Antibody (internal region) - Background

This antibody is expected to recognize isoform 1 (NP_061496.2), 4 (NP_938199.1), 5 (NP_938194.1), 8 (NP_938198.1), 9 (NP_938192.1), 10 (NP_938200.1) and isoform 15 (NP_938407.1).

CACNA1G Antibody (internal region) - References

Genetic enhancement of thalamocortical network activity by elevating alpha 1g-mediated low-voltage-activated calcium current induces pure absence epilepsy. Ernst WL, Zhang Y, Yoo JW, Ernst SJ, Noebels JL, J Neurosci. 2009 Feb 11;29(6):1615-25. PMID: 19211869