Anti-CAC1G antibody

Description	Unconjugated Rabbit polyclonal to CAC1G

Model	STJ191633
Host	Rabbit
Reactivity	Human, Rat
Applications	IHC
Immunogen	Synthesized peptide derived from human CAC1G protein.
Immunogen Region	360-440aa
Gene ID	8913
Gene Symbol	CACNA1G
Dilution range	IHC-p 1:50-300
Specificity	CAC1G Polyclonal Antibody detects endogenous levels of 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.
Purification	CAC1G antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	Voltage-dependent T-type calcium channel subunit alpha-1G Cav3.1c NBR13

	Voltage-gated calcium channel subunit alpha Cav3.1
Molecular Weight	261 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid form in PBS containing 50% glycerol,and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:1394OMIM:604065
Alternative Names	Voltage-dependent T-type calcium channel subunit alpha-1G Cav3.1c NBR13 Voltage-gated calcium channel subunit alpha Cav3.1
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.
Sequence and Domain Family	Each of the four internal repeats contains five hydrophobic transmembrane segments (S1, S2, S3, S5, S6) and one positively charged transmembrane segment (S4). S4 segments probably represent the voltage-sensor and are characterized by a series of positively charged amino acids at every third position.; The linker region between repeat III and IV probably plays a role in the inactivation of the channel. The C-terminal part may be implicated in the anchoring of the protein to the membrane by interfering with or restricting its lateral diffusion.
Cellular Localization	Cell membrane Cytoplasm
Post-translational Modifications	In response to raising of intracellular calcium, the T-type channels are activated by CaM-kinase II.