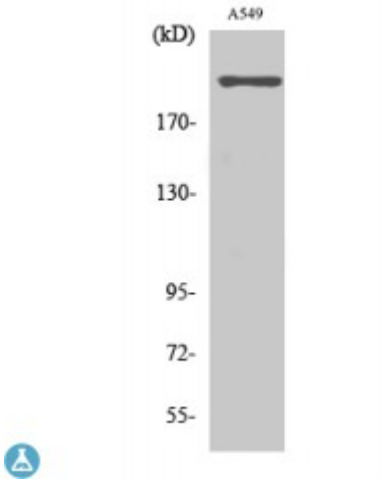
Anti-T-type Ca++ CP alpha H antibody



Description	Rabbit polyclonal to T-type Ca++ CP alpha1H.

Model	STJ96138
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	ELISA, WB
Immunogen	Synthesized peptide derived from human T-type Ca++ CP alpha1H
Immunogen Region	440-520 aa, Internal
Gene ID	8912
Gene Symbol	CACNA1H
Dilution range	WB 1:500-1:2000ELISA 1:10000
Specificity	T-type Ca++ CP alpha1H Polyclonal Antibody detects endogenous levels of T-type Ca++ CP alpha1H protein.
Tissue Specificity	In nonneuronal tissues, the highest expression levels are found in the kidney, liver, and heart. In the brain, most abundant in the amygdala, caudate nucleus, and putamen . In the heart, expressed in blood vessels. Isoform 1 and isoform 2 are expressed in testis, primarily in the germ cells, but not in other portions of the reproductive tract, such as ductus deferens. Isoform 2 is not detected in brain . Expressed in the adrenal glomerulosa (at protein level) .
Purification	The 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-1H Low-voltage-activated calcium channel alpha1 3.2 subunit Voltage-gated calcium channel subunit alpha Cav3.2
Molecular Weight	259 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:1395OMIM:607904
Alternative Names	Voltage-dependent T-type calcium channel subunit alpha-1H Low-voltage-activated calcium channel alpha1 3.2 subunit Voltage-gated calcium channel subunit alpha Cav3.2
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-1H gives rise to T-type calcium currents. T-type calcium channels belong to the "low-voltage activated (LVA)" group and are strongly blocked by nickel and 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. In the adrenal zona glomerulosa, participates in the signaling pathway leading to aldosterone production in response to either AGT/angiotensin II, or hyperkalemia .
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.
Cellular Localization	Membrane. Multi-pass membrane protein.
Post-translational Modifications	In response to raising of intracellular calcium, the T-type channels are activated by CaM-kinase II.