

Mouse CaV3.1 Monoclonal Antibody | anti-Cacna1g antibody

CaV3.1 Antibody: HRP

CATALOG # AAA103392	HOST Mouse	REACTIVITY Human, Mouse, Rat	APPLICATIONS Immunohistochemistry, Western Blot
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PRODUCT SYNONYMS

CaV3.1; Monoclonal Antibody; CaV3.1 Antibody: HRP; CACNA1G; CaV T1; Cav3 1; cav3 1c; KIAA1123; MGC117234; NBR13; voltage gated calcium channel cav3.1; calcium channel voltage dependent alpha 1G subunit; calcium channel voltage dependent T type alpha 1G subunit; calcium channel antibody; anti-Cacna1g antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human, Mouse, Rat
Clonality	Monoclonal
Isotype	IgG1
Clone Number	S178A-9
Specificity	Detects ~<200kDa. Does not cross-react with Cav.3.2.
Form/Format	Protein G Purified
Concentration	1mg/mL (varies by lot)
Sequence Length	2272
Applicable Applications for anti-Cacna1g antibody	IHC (Immunohistochemistry), WB (Western Blot)
Conjugate	HRP
Immunogen	Fusion protein amino acids 2052-2172 (Cytoplasmic C-terminus) of mouse Cav3.1
Storage Buffer	PBS pH7.4, 50% glycerol, 0.09% sodium azide
Research Area(s)	Neuroscience Ion Channels Calcium Channels Voltage-Gated Calcium Channels
Cellular Localization	Membrane Multipass membrane protein.
Gene ID	12291
Acession Number	NP_001106284.1
Swiss Prot	Q9WUT2
Preparation and Storage	-20 degree C;1 year+Avoid freeze/thaw cycle.

IMAGES



WB (Western Blot)

Western Blot analysis of Rat brain membrane lysate showing detection of Cav3.1 Calcium Channel protein using Mouse Anti-Cav3.1 Calcium Channel Monoclonal Antibody, Clone S178A-9. Primary Antibody: Mouse Anti-Cav3.1 Calcium Channel Monoclonal Antibody at 1:1000.

ADDITIONAL INFORMATION

Related Product Information for anti-Cacna1g antibody	Background Info: Detects ~>200kDa. Does not cross-react with Cav3.2 Scientific Background: Calcium channel CaV3.1 (a1G) is a low-voltage-activated T-type calcium channel. Such T-type channels are expressed throughout the body. In the heart, they may be involved in pacemaker current. In neurons, these channels may play a secondary pacemaker role (3). With the ubiquitous expression, it is not surprising that alterations in channel function have been implicated in disease. Drugs that act to block T-type calcium channels are used as anti-hypertensives, antiepileptic's, and blocking of T-type calcium channels may be involved in the action of some anesthetics and antipsychotics as well (3). Much remains to be determined about the precise cellular localization, in vivo physiological roles, roles in disease states and possible routes to modulate their structure/function to ameliorate effects of disease.
Product Categories/Family for anti-Cacna1g antibody	Ion Channels
References	1. Hille B. (2001) Ion Channels of Excitable Membranes, 3rd Ed., Sinauer Associated Inc.:Sunderland, MA USA. 2. www.iochannels.org 3. Perez-Reyes E. (2003). Physiol. Rev., 83: 117-161.

NCBI AND UNIPROT INFORMATION

NCBI GI #	163914404
NCBI GeneID	12291
NCBI Accession #	NP_001106284.1
NCBI GenBank Nucleotide #	NM_001112813.2
UniProt Accession #	Q9WUT2
Molecular Weight	253,960 Da
NCBI Official Full Name	calcium channel, voltage-dependent, T type, alpha 1G subunit isoform b
NCBI Official Synonym Full Names	calcium channel, voltage-dependent, T type, alpha 1G subunit
NCBI Official Symbol	Cacna1g
NCBI Official Synonym Symbols	a1G; [a]1G; Cav3.1d; alpha-1G; mKIAA1123
NCBI Protein Information	calcium channel, voltage-dependent, T type, alpha 1G subunit
UniProt Protein Name	Voltage-gated calcium channel, alpha-1-G subunit
UniProt Gene Name	Cacna1g
UniProt Entry Name	Q9WUT2_MOUSE

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.