

Datasheet for ABIN7043008

anti-CACNA1G antibody (Intracellular)



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2 Images

Overview

Quantity:	25 µL
Target:	CACNA1G
Binding Specificity:	AA 1-22, Intracellular
Reactivity:	Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This CACNA1G antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunofluorescence (IF), Immunochromatography (IC)

Product Details

Purpose:	A Rabbit Polyclonal Antibody to CACNA1G (CaV3.1) Channel
Immunogen:	Immunogen: Synthetic peptide Immunogen Sequence: MDEEDGAGAEESGQPRSFTQL(C), corresponding to amino acid residues 1-22 of rat CACNA1G
Isotype:	IgG
Specificity:	Intracellular, N-terminus
Cross-Reactivity:	Human, Mouse, Rat
Predicted Reactivity:	Mouse - identical, human - 20,22 amino acid residues identical
Characteristics:	Anti-CACNA1G (CaV3.1) Antibody (ABIN7043008, ABIN7043976 and ABIN7043977) is a highly

Product Details

specific antibody directed against an epitope of the rat CaV3.1 channel. The antibody can be used in western blot, immunocytochemistry, and immunohistochemistry applications. It has been designed to recognize CACNA1G from human, rat, and mouse samples.

Purification: Affinity purified on immobilized antigen.

Grade: KO Validated

Target Details

Target: CACNA1G

Alternative Name: CACNA1G ([CACNA1G Products](#))

Background: Voltage-dependent T-type calcium channel subunit $\alpha 1G$, Voltage-dependent Ca^{2+} channels provide a pathway for rapid influx of Ca^{2+} into cells, which plays a crucial role in both electrical and metabolic signaling.¹ T-type currents are transduced via channel proteins encoded by three genes that compose a subfamily within the CaV channel family.²⁻³ The activity of T-type channels contributes to several known physiological and pathophysiological phenomena including burst firing in neurons, pacemaking activity in the heart and secretion from endocrine tissues.² There are three cloned T-type channel isoforms. CACNA1G (CaV3.1) and CACNA1H (CaV3.2) are widely distributed whereas the expression of CACNA1I (CaV3.3) is restricted to the central nervous system.² CACNA1G and CACNA1H are also expressed in the kidney, but little is known about their physiological role there.

Alternative names: CACNA1G (CaV3.1), Voltage-dependent T-type calcium channel subunit $\alpha 1G$ (T-Type)

Gene ID: 29717

NCBI Accession: [NM_018896](#)

UniProt: [O54898](#)

Application Details

Application Notes: Antigen preadsorption control: 1 μ g peptide per 1 μ g antibody
Application Dilutions Immunohistochemistry paraffin embedded sections ihc: N/A
Application Dilutions Western blot wb: 1:200

Comment: Cited Application: IP|IHC|ICC
Negative Control: (ABIN7234993)

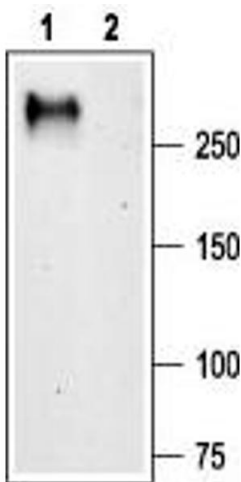
Application Details

	Blocking Peptide: (ABIN7234993)
Restrictions:	For Research Use only

Handling

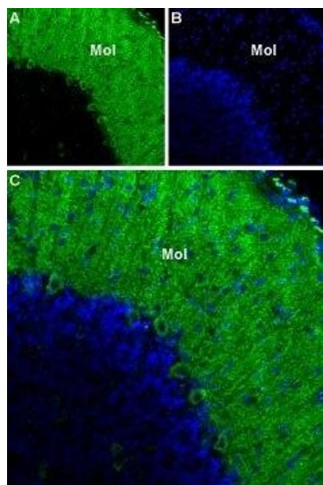
Format:	Lyophilized
Reconstitution:	Reconstitute with double distilled water (DDW) to a concentration of 1.0 mg/mL.
Concentration:	1 mg/mL
Buffer:	PBS pH 7.4
Storage:	4 °C,-20 °C
Storage Comment:	<p>Storage before reconstitution: The antibody ships as a lyophilized powder at room temperature. Upon arrival, it should be stored at -20°C.</p> <p>Storage after reconstitution: The reconstituted solution can be stored at 4°C for up to 1 week. For longer periods, small aliquots should be stored at -20°C. Avoid multiple freezing and thawing. Centrifuge all antibody preparations before use (10000 x g 5 min).</p>

Images



Western Blotting

Image 1. Western blot analysis of rat brain membranes: - 1. Anti-CACNA1G (CaV3.1) Antibody (ABIN7043008, ABIN7043976 and ABIN7043977), (1:200). 2. Anti-CACNA1G (CaV3.1) Antibody, preincubated with CACNA1G/Cav3.1 Blocking Peptide (#BLP-CC021).



Immunohistochemistry

Image 2. Expression of CACNA1G in rat cerebellum - Immunohistochemical staining of rat cerebellum using Anti-CACNA1G (CaV3.1) Antibody (ABIN7043008, ABIN7043976 and ABIN7043977). A. CACNA1G immunoreactivity (green) appears in the molecular layer. B. Nuclear staining using DAPI as the counterstain (blue). C. Merged images A and B. Mol = molecular layer.