

Datasheet for ABIN7043009

anti-CACNA1G antibody (Intracellular) (Atto 594)



[Go to Product page](#)

1 Image

Overview

Quantity:	50 µL
Target:	CACNA1G
Binding Specificity:	AA 1-22, Intracellular
Reactivity:	Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This CACNA1G antibody is conjugated to Atto 594
Application:	Immunohistochemistry (IHC), Immunofluorescence (IF)

Product Details

Purpose:	A Rabbit Polyclonal Antibody to CACNA1G (CaV3.1) Conjugated to the Fluorescent Dye ATTO-594
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. \nAnti-CACNA1G (CaV3.1)-ATTO Fluor-594 Antibody (ABIN7043009) is directly labeled with fluorescent dye. ATTO dyes are characterized by strong absorption (high extinction coefficient), high fluorescence quantum yield, and high photo-stability. The fluorescent label belongs to the class of Rhodamine dyes and can be used with fluorescent equipment typically optimized to detect Texas Red and Alexa-594. Anti-CACNA1G (CaV3.1)-ATTO Fluor-594 Antibody is ideal for multiplex staining studies.

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 α 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.²CACNA1G 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 alpha1G

Gene ID: 29717

NCBI Accession: [NM_018896](#)

UniProt: [O54898](#)

Application Details

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

Comment:	Negative Control: (ABIN7234993) 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
----------------	---------

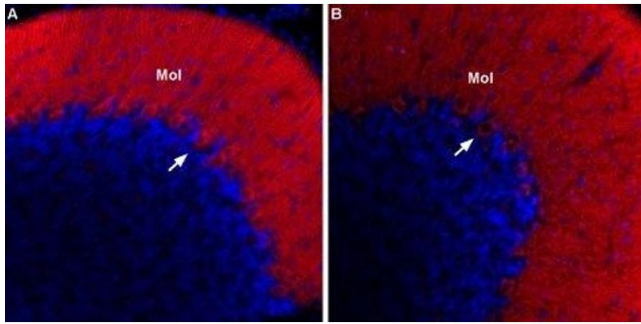
Buffer:	PBS pH 7.4, 1 % BSA with 0.05 % sodium azide
---------	--

Preservative:	Sodium azide
---------------	--------------

Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
--------------------	--

Storage:	4 °C, -20 °C
----------	--------------

Storage Comment:	Storage before reconstitution: The antibody ships as a lyophilized powder at room temperature. Upon arrival, it should be stored at -20°C. Storage after reconstitution: The reconstituted solution can be stored at 4°C, protected from the light, 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).
------------------	--



Immunohistochemistry

Image 1. Expression of CACNA1G in rat and mouse cerebellum - Immunohistochemical staining of mouse (A) and rat (B) cerebellum using Anti-CACNA1G (CaV3.1)-ATTO Fluor-594 Antibody (ABIN7043009). A, B. CACNA1G staining (red) appears in Purkinje neurons (arrow) and in the molecular layer (Mol). Nuclei were stained using DAPI as the counterstain (Blue).