Datasheet for ABIN7042998

anti-CACNA1C antibody (Intracellular) (Atto 488)

3 Images

Go to Product page

Overview

Quantity:	50 µL
Target:	CACNA1C
Binding Specificity:	AA 848-865, Intracellular
Reactivity:	Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This CACNA1C antibody is conjugated to Atto 488
Application:	Immunohistochemistry (IHC), Immunofluorescence (IF), Immunochromatography (IC)

Product Details

Purpose:	A Rabbit Polyclonal Antibody to CaV1.2 (CACNA1C) Channel Conjugated to the Fluorescent Dye ATTO-488
Immunogen:	Immunogen: Synthetic peptide Immunogen Sequence: (C)TTKINMDDLQPSENEDKS, corresponding to amino acid residues 848-865 of rat CaV1.2
Isotype:	IgG
Specificity:	Intracellular loop between domains II and III
Cross-Reactivity:	Human, Mouse, Rat
Predicted Reactivity:	guinea pig - 17,18 amino acid residues identical, human,rabbit - 16,Mouse - identical
Characteristics:	Anti-CaV1.2 (CACNA1C) Antibody (ABIN7042997, ABIN7043953 and ABIN7043954) is a highly

Product Details

	specific antibody directed against an epitope of rat CaV1.2 channel. The antibody can be used in western blot, immunoprecipitation, immunohistochemistry, immunocytochemistry, and indirect flow cytometry applications. It has been designed to recognize CaV1.2 from mouse, rat, and human samples. \nAnti-CaV1.2 (CACNA1C)-ATTO Fluor-488 Antibody (ABIN7042998) is directly labeled with an fluorescent dye. ATTO dyes are characterized by strong absorption (high extinction coefficient), high fluorescence quantum yield, and high photo-stability. The label is analogous to fluorescein isothiocyanate (FITC) and can be used with filters typically used to detect FITC. Anti-CaV1.2 (CACNA1C)-ATTO Fluor-488 Antibody has been tested in immunohistochemical and immunocytochemical applications and is specially suited to experiments requiring simultaneous labeling of different markers.
Purification:	Affinity purified on immobilized antigen.
Grade:	KO Validated

Target Details

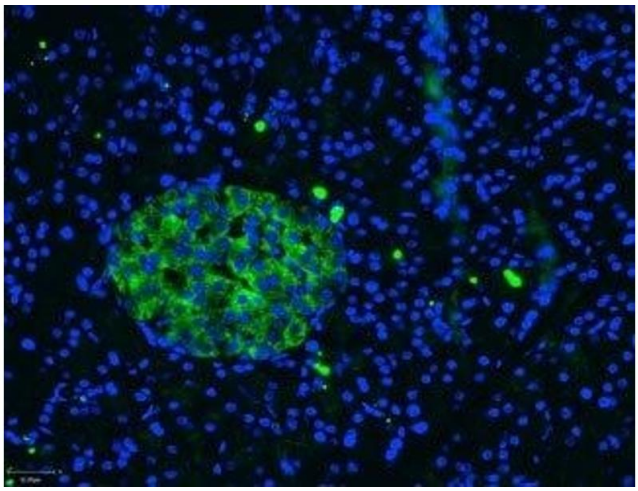
Target:	CACNA1C
Alternative Name:	CACNA1C (CACNA1C Products)
Background:	Voltage-dependent L-type calcium channel subunit α1C,All L-type calcium channels are encoded by one of the CaV1 channel genes. These channels play a major role as a Ca2+ entry pathway in skeletal, cardiac and smooth muscles as well as in neurons, endocrine cells and possibly in non-excitable cells such as hematopoetic and epithelial cells. All CaV1 channels are influenced by dihydropyridines (DHP) and are also referred to as DHP receptors.While the CaV1.1 and CaV1.4 isoforms are expressed in restricted tissues (skeletal muscle and retina, respectively), the expression of CaV1.2 is ubiquitous and CaV1.3 channels are found in the heart, brain and pancreas. Several peptidyl toxins are described that are specific L-type channel blockers, but so far no selective blocker for one of the CaV1 isoforms have been described. These include the Mamba toxins Calcicludine (#SPC-650), Calciseptine (#C-500) and FS-2 (#F-700). Alternative names: Cav1.2, Voltage-dependent L-type Ca2+ channel subunit alpha1C, Cacna1c
Gene ID:	24239
NCBI Accession:	NM_000719
UniProt:	P22002
Pathways:	Hormone Transport, Carbohydrate Homeostasis

Application Details

Application Notes:	Antigen preadsorption control: 1 µg peptide per 1 µg antibody Application Dilutions Immunohistochemistry paraffin embedded sections ihc: 1:50-1:100 Application Dilutions Western blot wb: N/A
Comment:	Cited Application: ICC Negative Control: (ABIN7582041) Blocking Peptide: (ABIN7234965)
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	50 µL double distilled water (DDW).
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).

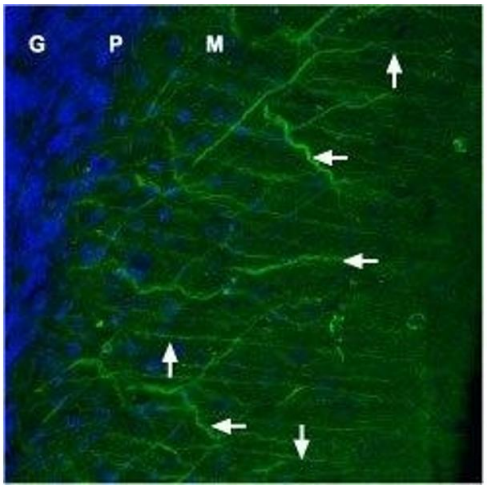


Immunohistochemistry

Image 1. Expression of CaV1.2 in rat pancreas - Immunohistochemical staining of paraffin embedded sections of rat pancreas using Anti-CaV1.2 (CACNA1C)-ATTO Fluor-488 Antibody (ABIN7042998), (1:50). Staining is highly specific for endocrine cells of the Isle of Langerhans (IL).

Immunocytochemistry

Image 2. Expression of CaV1.2 in mouse pancreatic microvascular endothelial cells (MS1) - Immunocytochemical staining of MS1 cells. A. Intracellular staining of paraformaldehyde-fixed and permeabilized MS1 cells with Anti-CaV1.2 (CACNA1C)-ATTO Fluor-488 Antibody (ABIN7042998), (1:50). B. The cell-permeable dye Hoechst 33342 (blue) was used for nuclear staining. C. Merged image of panels A and B.



Immunohistochemistry

Image 3. Expression of CaV1.2 in rat cerebellum - Immunohistochemical staining of rat cerebellum frozen sections with Anti-CaV1.2 (CACNA1C)-ATTO Fluor-488 Antibody (ABIN7042998), (1:100). Both dendrites of Purkinje cells (horizontal arrows) and fibers of Bergmann glia (vertical arrows) were stained. DAPI (blue Nissl counterstain) helps define the layers: granule (G), Purkinje (P) and molecular (M).