

Datasheet for ABIN7042997

anti-CACNA1C antibody (Intracellular)



[Go to Product page](#)

3 Images

Overview

Quantity:	25 µL
Target:	CACNA1C
Binding Specificity:	AA 848-865, Intracellular
Reactivity:	Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This CACNA1C antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunofluorescence (IF), Immunochromatography (IC), Flow Cytometry (FACS)

Product Details

Purpose:	A Rabbit Polyclonal Antibody to CaV1.2 (CACNA1C) Channel
Immunogen:	Immunogen: Synthetic peptide Immunogen Sequence: (C)TTKINMDDLQPSINEDKS, 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 the rat protein. 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.

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 $\alpha 1C$, All L-type calcium channels are encoded by one of the CaV1 channel genes. These channels play a major role as a Ca^{2+} entry pathway in skeletal, cardiac and smooth muscles as well as in neurons, endocrine cells and possibly in non-excitabile cells such as hematopoietic 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 Ca^{2+} channel subunit $\alpha 1C$, Cacna1c

Gene ID: 24239

NCBI Accession: [NM_000719](#)

UniProt: [P22002](#)

Pathways: [Hormone Transport](#), [Carbohydrate Homeostasis](#)

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

Application Details

Comment: Cited Application: IP|IHC|ICC
Negative Control: (ABIN7234965)
Blocking Peptide: (ABIN7234965)

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: 0.2 mL double distilled water (DDW).

Concentration: 1 mg/mL

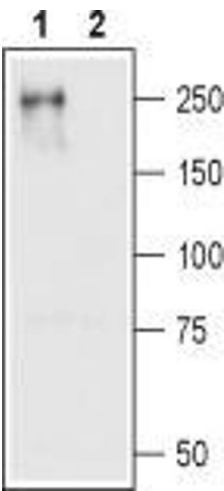
Buffer: PBS pH 7.4

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.

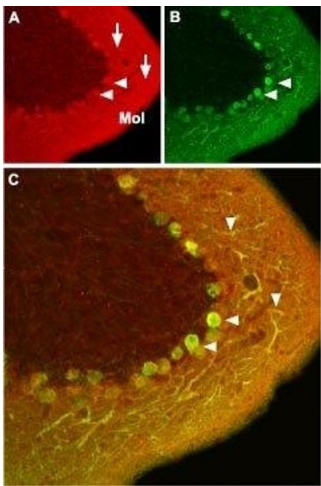
Storage after reconstitution: The reconstituted solution can be stored at 4°C for up to 1 week. For longer periods, small aliquots should be stored at -20°C. Avoid multiple freezing and thawing. Centrifuge all antibody preparations before use (10000 x g 5 min).

Images



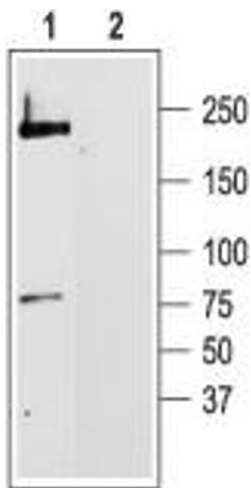
Western Blotting

Image 1. Western blot analysis of CaV1.2-transfected Xenopus oocytes (lane 1) and non-transfected oocytes lysates (lane 2): - 1. Anti-CaV1.2 (CACNA1C) Antibody (ABIN7042997, ABIN7043953 and ABIN7043954), (1:200) in CaV1.2 (CACNA1C) Channel Overexpressed in Xenopus oocytes.2. Anti-CaV1.2 (CACNA1C) Antibody in non-transfected oocytes.



Immunohistochemistry

Image 2. Expression of CaV1.2 in mouse cerebellum - Immunohistochemical staining of mouse cerebellum with Anti-CaV1.2 (CACNA1C) Antibody (ABIN7042997, ABIN7043953 and ABIN7043954). A. CaV1.2 (red) appears in Purkinje cells (horizontal arrows) and is distributed diffusely in the molecular layer (Mol) including in Purkinje dendrites (vertical arrows). B. Staining of Purkinje nerve cells with mouse anti-Calbindin 28K (green) demonstrates the location of dendrites in the molecular layer. C. Merged image of panels A and B.



Western Blotting

Image 3. Western blot analysis of rat brain membranes: - 1. Anti-CaV1.2 (CACNA1C) Antibody (ABIN7042997, ABIN7043953 and ABIN7043954), (1:200). 2. Anti-CaV1.2 (CACNA1C) Antibody, preincubated with Cav1.2/CACNA1C Blocking Peptide (#BLP-CC003).