

Datasheet for 200-301-F09**Cav1.3 Antibody****Overview**

Description:	Anti-CAV1.3 (MOUSE) Monoclonal Antibody - 200-301-F09
Item No.:	200-301-F09
Size:	100 µg
Applications:	IF, IHC, IP, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Mouse

Product Details

Background:	Specifically, Cav1.3, also known as the calcium channel, voltage-dependent, L type, alpha 1D subunit (CACNA1D), is a human gene. Cav1.3 subunits are primarily expressed in neurons and neuroendocrine cells. Some studies suggest however that Cav1.3 is also found in the atria, and may figure prominently in atrial arrhythmias. Cav1.3 also carries the primary sensory receptors of the mammalian cochlea, and are also expressed in the electromotile outer hair cells.
Synonyms:	CACH3, CACN4, CACNA 1D, CACNL1A2, voltage dependent L type calcium channel subunit alpha 1D, Calcium channel, L type, alpha-1 polypeptide, isoform 2, Rat brain class D
Host Species:	Mouse
Clonality:	Monoclonal
Clone ID:	S48
Format:	IgG2a

Target Details

Gene Name:	Cacna1d
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Recombinant Protein
Immunogen:	Cav1.3 Antibody was produced in mice by repeated immunizations with a fusion protein corresponding to an internal region of rat Cav1.3.

Purity/Specificity: Anti-Cav1.3 Antibody was purified by Protein G chromatography. A BLAST analysis was used to suggest cross-reactivity with Cav1.3 from Human, Rat, and Mouse based on 100% homology with the immunizing sequence. No cross-reactivity against Cav1.2. Cross-reactivity with Cav1.3 from other sources has not been determined. Channels and Transporters research.

Relevant Links:

- [NCBI - NP_058994.1](#)
- [GeneID - 29716](#)
- [UniProtKB - P27732](#)

Application Details

Tested Applications: IF, IHC, IP, WB

Application Note: Anti-Cav1.3 Antibody was tested in WB, IP, IHC-P, and IF microscopy. Expect a band approximately ~250kDa on specific lysates. Specific conditions for reactivity should be optimized by the end user.

Assay Dilutions: All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.

IF: 1.0-10ug/mL

IHC: 0.1-1.0ug/mL

IP: User Optimized

WB: 1-10ug/mL

Formulation

Physical State: Liquid (sterile filtered)

Concentration: 1mg/mL by UV absorbance at 280 nm

Buffer: 1X PBS, pH 7.4

Preservative: 0.09% (w/v) Sodium Azide

Stabilizer: 50% (v/v) Glycerol

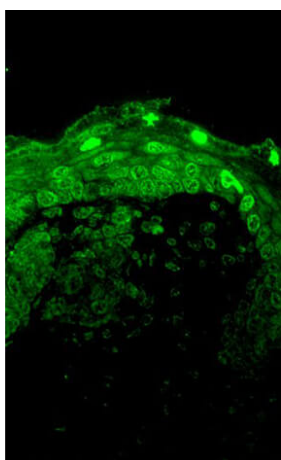
Shipping & Handling

Shipping Condition: Dry Ice

Storage Condition: Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Expiration: Expiration date is one (1) year from date of receipt.

Images



Immunofluorescence Microscopy

Immunofluorescence Microscopy of mouse anti-CAV 1.2 antibody. Tissue: Human hippocampus tissues. Fixation: N/A. Primary antibody: anti-CAV 1.2 for 1h at RT. Secondary antibody: Fluorescein mouse secondary antibody at 1:10,000 for 45 min at RT. Localization: Membrane. Staining: Cav 1.2 as precipitated green signal.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.