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Cav1.3 Antibody
Cav1.3 Antibody, Clone S38-8
Catalog # ASM10180

Specification

Cav1.3 Antibody - Product Information

Application	IHC, WB
Primary Accession	P27732
Other Accession	NP_058994.1
Host	Mouse
Isotype	IgG1
Reactivity	Human, Mouse, Rat
Clonality	Monoclonal

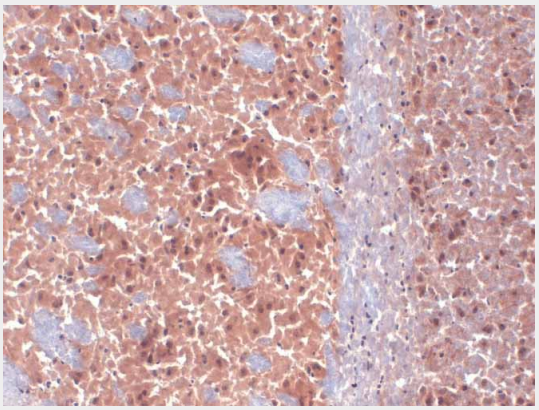
Description
Mouse Anti-Rat Cav1.3 Monoclonal IgG1

Target/Specificity
Detects ~250kDa. No cross-reactivity against Cav1.2.

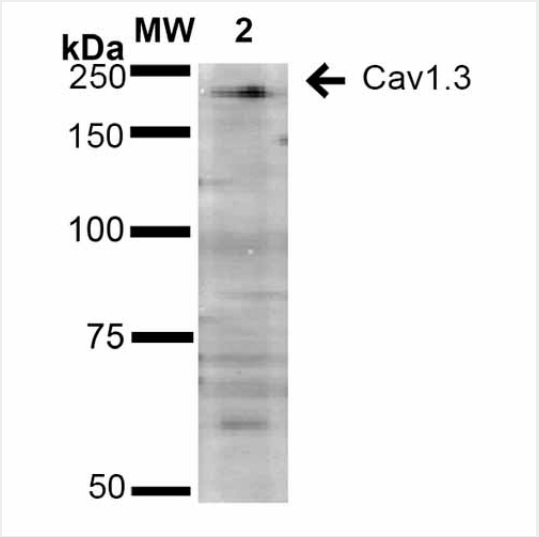
Other Names
alpha-1 polypeptide Antibody, CAC1D_HUMAN Antibody, CACH3 Antibody, CACN4 Antibody, CACNA 1D Antibody, Cacna1d Antibody, CACNL1A2 Antibody, Calcium channel Antibody, Calcium channel L type alpha 1 polypeptide isoform 2 Antibody, Calcium channel neuroendocrine/brain type alpha 1 subunit Antibody, Calcium channel voltage dependent L type alpha 1D subunit Antibody, CCHL1A2 Antibody, isoform 2 Antibody, L type Antibody, Voltage dependent L type calcium channel subunit alpha 1D Antibody, Voltage gated calcium channel alpha 1 subunit Antibody, Voltage gated calcium channel alpha subunit Cav1.3 Antibody, Voltage gated calcium channel subunit alpha Cav1.3 Antibody, Voltage-dependent L-type calcium channel subunit alpha-1D Antibody, Voltage-gated calcium channel subunit alpha Cav1.3 Antibody

Immunogen
Fusion protein amino acids 2025-2161 of rat Cav1.3

Purification
Protein G Purified



Immunohistochemistry analysis using Mouse Anti-CaV1.3 Calcium channel Monoclonal Antibody, Clone S38-8 (ASM10180). Tissue: frozen brain section. Species: mouse. Fixation: 10% Formalin Solution for 12-24 hours at RT. Primary Antibody: Mouse Anti-CaV1.3 Calcium channel Monoclonal Antibody (ASM10180) at 1:1000 for 1 hour at RT. Secondary Antibody: HRP/DAB Detection System: Biotinylated Goat Anti-Mouse, Streptavidin Peroxidase, DAB Chromogen (brown) for 30 minutes at RT. Counterstain: Mayer Hematoxylin (purple/blue) nuclear stain at 250-500 µl for 5 minutes at RT.



Western Blot analysis of Rat showing

Storage -20ºC

Storage Buffer

PBS pH7.4, 50% glycerol, 0.09% sodium azide

Shipping Temperature **Blue Ice or 4ºC**

Certificate of Analysis

1 µg/ml of SMC-302 was sufficient for detection of Cav1.3 in 10 µg of rat brain lysate by colorimetric immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.

Cellular Localization

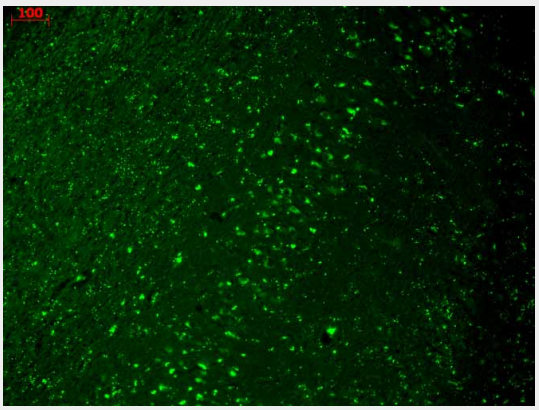
Membrane | Cell Membrane

Cav1.3 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

detection of ~250 kDa Cav1.3 protein using Mouse Anti-Cav1.3 Monoclonal Antibody, Clone S38-8 (ASM10180). Lane 1: Molecular Weight Ladder (MW). Lane 2: Rat Tissue cell lysate. Load: 20 µg. Block: 2% BSA and 2% Skim Milk in 1X TBST. Primary Antibody: Mouse Anti-Cav1.3 Monoclonal Antibody (ASM10180) at 1:1000 for 16 hours at 4°C. Secondary Antibody: Goat Anti-Mouse IgG: HRP at 1:100 for 60 min at RT. Color Development: ECL solution for 6 min in RT. Predicted/Observed Size: ~250 kDa.



Immunohistochemistry analysis using Mouse Anti-CaV1.3 Calcium Channel Monoclonal Antibody, Clone S38-8 (ASM10180). Tissue: hippocampus. Species: Human. Fixation: Bouin's Fixative and paraffin-embedded. Primary Antibody: Mouse Anti-CaV1.3 Calcium Channel Monoclonal Antibody (ASM10180) at 1:1000 for 1 hour at RT. Secondary Antibody: FITC Goat Anti-Mouse (green) at 1:50 for 1 hour at RT.

Cav1.3 Antibody - Background

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 neuroendocine cells. Some studies suggest however that CaV1.3 is also found in the atria, and may figure prominently in atrial arrhythmias (1). CaV1.3 also carries the primary sensory receptors of the mammalian cochlea, and are also expressed in the electromotile outer hair cells (2).

Cav1.3 Antibody - References

1. Zhang Z., et al. (2005) Circulation 112:

1936-1944.
2. Johnson S.L. and Marcotti W. (2008) The Journal of Physiology. 586: 1029-1042.