

Cav1.3 Antibody

Cav1.3 Antibody, Clone S48A-9 Catalog # ASM10179

Specification

Cav1.3 Antibody - Product Information

Application IHC
Primary Accession P27732
Other Accession NP_058994.1
Host Mouse
Isotype IgG2a Kappa

Reactivity Human, Mouse, Rat

Clonality Monoclonal

Description

Mouse Anti-Rat Cav1.3 Monoclonal IgG2a Kappa

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 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 859-875 of rat Cav1.3

PurificationProtein G Purified

Storage -20°C

Storage Buffer

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

Shipping Temperature Blue Ice or 4°C

Certificate of Analysis

 $1 \mu g/ml$ of SMC-301 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

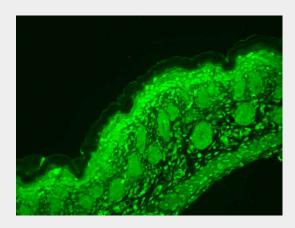
Cav1.3 Antibody - Protocols



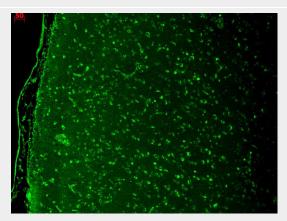
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Cav1.3 Antibody - Images



Immunohistochemistry analysis using Mouse Anti-CaV1.3 Calcium Channel Monoclonal Antibody, Clone S48A-9 (ASM10179). Tissue: backskin. Species: Mouse. Fixation: Bouin's Fixative and paraffin-embedded. Primary Antibody: Mouse Anti-CaV1.3 Calcium Channel Monoclonal Antibody (ASM10179) at 1:100 for 1 hour at RT. Secondary Antibody: FITC Goat Anti-Mouse (green) at 1:50 for 1 hour at RT.



Immunohistochemistry analysis using Mouse Anti-CaV1.3 Calcium Channel Monoclonal Antibody, Clone S48A-9 (ASM10179). Tissue: hippocampus. Species: Human. Fixation: Bouin's Fixative and paraffin-embedded. Primary Antibody: Mouse Anti-CaV1.3 Calcium Channel Monoclonal Antibody (ASM10179) 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

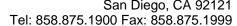




figure prominently in atrial arrhythmias (1). CaV1.3 also carries the primary sensory receptors of the mammalian cochlea, and are also expressed in the electromotile outer hair cells (2).

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.