

**Cav beta 1 Antibody**  
**Cav beta 1 Antibody, Clone S7-18**  
**Catalog # ASM10195****Specification**

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**Cav beta 1 Antibody - Product Information**

Application	IHC, WB
Primary Accession	<a href="#">P54283</a>
Other Accession	<a href="#">NP_059042</a>
Host	Mouse
Isotype	IgG1
Reactivity	Human, Mouse, Rat
Clonality	Monoclonal

**Description**

Mouse Anti-Rat Cav beta 1 Monoclonal IgG1

**Target/Specificity**

Detects ~80, 55kDa. No cross-reactivity against Cav Beta4.

**Other Names**

CACNB1 Antibody, CAB1 Antibody, CACNLB1 Antibody, voltage dependent L type calcium channel beta 1 subunit Antibody

**Immunogen**

Synthetic peptide amino acids 19-34 of rat CavB1

**Purification**

Protein 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 µg/ml of SMC-317 was sufficient for detection of Cavβ1 in 10 µg of rat brain lysate by colorimetric immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.

**Cellular Localization**

Cell Membrane

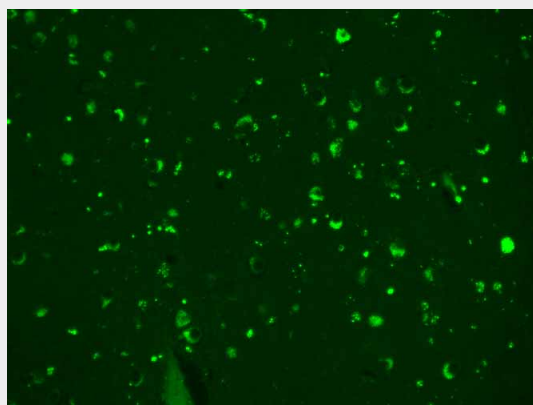
**Cav beta 1 Antibody - Protocols**

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

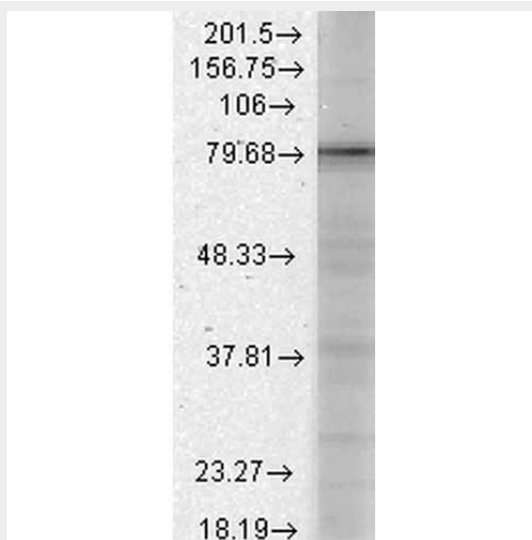
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)

- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Cav beta 1 Antibody - Images



Immunohistochemistry analysis using Mouse Anti-CACNB1 Calcium Channel Monoclonal Antibody, Clone S7-18 (ASM10195). Tissue: hippocampus. Species: Human. Fixation: Bouin's Fixative and paraffin-embedded. Primary Antibody: Mouse Anti-CACNB1 Calcium Channel Monoclonal Antibody (ASM10195) at 1:1000 for 1 hour at RT. Secondary Antibody: FITC Goat Anti-Mouse (green) at 1:50 for 1 hour at RT.



Western Blot analysis of Rat brain membrane lysate showing detection of CACNB1 Calcium Channel protein using Mouse Anti-CACNB1 Calcium Channel Monoclonal Antibody, Clone S7-18 (ASM10195). Load: 15 µg. Block: 1.5% BSA for 30 minutes at RT. Primary Antibody: Mouse Anti-CACNB1 Calcium Channel Monoclonal Antibody (ASM10195) at 1:1000 for 2 hours at RT. Secondary Antibody: Sheep Anti-Mouse IgG: HRP for 1 hour at RT.

### Cav beta 1 Antibody - Background

Calcium channel, voltage-dependent, beta 1 subunit, also known as CACNB1, is a human gene. The protein encoded by this gene belongs to the calcium channel beta subunit family. It plays an important role in the calcium channel by modulating G protein inhibition, increasing peak calcium current, controlling the alpha-1 subunit membrane targeting and shifting the voltage dependence of activation and inactivation. Alternative splicing occurs at this locus and three transcript variants

encoding three distinct isoforms have been identified (1, 2).

### **Cav beta 1 Antibody - References**

1. [www.iochannels.org](http://www.iochannels.org)
2. Leyris J.P., et al. (2009) Faseb J. EPub.