

**Cav3.2 Antibody**  
**Cav3.2 Antibody, Clone S55-10**  
**Catalog # ASM10181****Specification**

---

**Cav3.2 Antibody - Product Information**

|                   |                                |
|-------------------|--------------------------------|
| Application       | WB, IHC, ICC, AM               |
| Primary Accession | <a href="#">O95180</a>         |
| Other Accession   | <a href="#">NP_001005407.1</a> |
| Host              | Mouse                          |
| Isotype           | IgG1                           |
| Reactivity        | Human, Mouse, Rat              |
| Clonality         | Monoclonal                     |

**Description**

Mouse Anti-Human Cav3.2 Monoclonal IgG1

**Target/Specificity**

Detects ~260kDa. No cross-reactivity against Cav1.3.

**Other Names**

Cav3.2 Antibody, CACNA1H Antibody, CACNA1HB Antibody, calcium channel Antibody, voltage-dependent Antibody, T type Antibody, alpha 1H subunit Antibody, calcium channel Antibody, voltage-dependent Antibody, T type Antibody, alpha 1Hb subunit Antibody, ECA6 Antibody, EIG6 Antibody, FLJ90484 Antibody, Low-voltage-activated calcium channel alpha1 3.2 subunit Antibody, low-voltage-activated calcium channel alpha13.2 subunit Antibody, voltage dependent t-type calcium channel alpha-1H subunit Antibody, voltage-dependent T-type calcium channel subunit alpha-1H Antibody, voltage-gated calcium channel alpha subunit Cav3.2 Antibody, voltage-gated calcium channel alpha subunit CavT.2 Antibody, Voltage-gated calcium channel subunit alpha Cav3.2 Antibody

**Immunogen**

Fusion protein amino acids 1019-1293 (II-III loop) of human Cav3.2

**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-303 was sufficient for detection of Cav3.2 in 10 µg of HEK cell lysate expressing Cav3.2 by colorimetric immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.

**Cellular Localization**

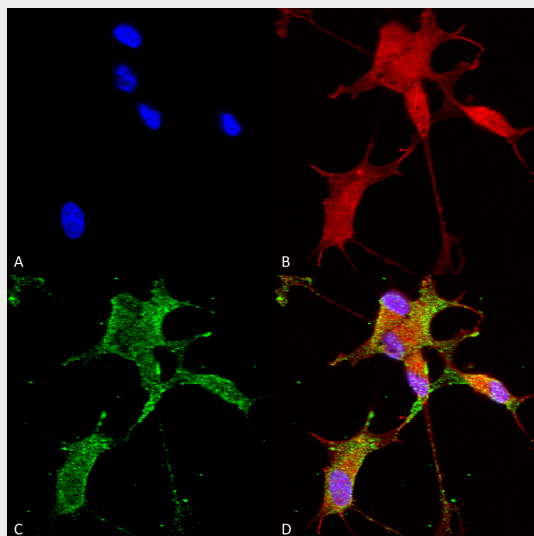
Membrane

**Cav3.2 Antibody - Protocols**

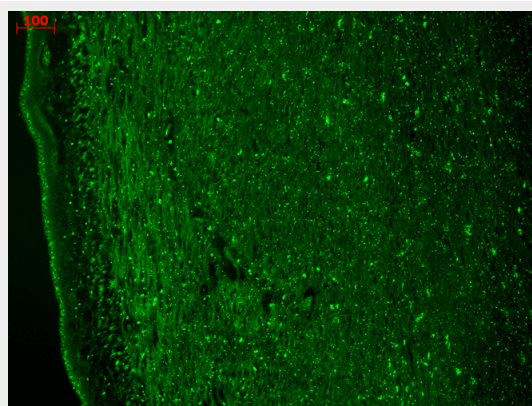
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Cav3.2 Antibody - Images

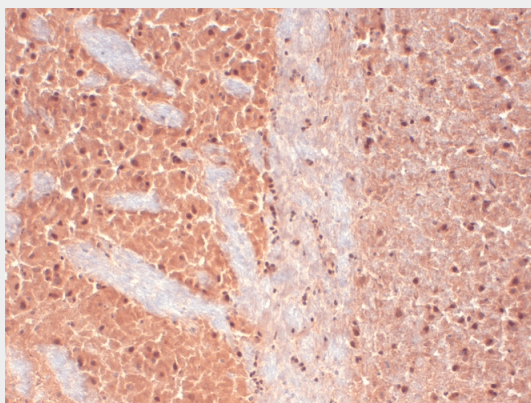


Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-Cav3.2 Monoclonal Antibody, Clone N55/10 (ASM10181). Tissue: Neuroblastoma cells (SH-SY5Y). Species: Human. Fixation: 4% PFA for 15 min. Primary Antibody: Mouse Anti-Cav3.2 Monoclonal Antibody (ASM10181) at 1:50 for overnight at 4°C with slow rocking. Secondary Antibody: AlexaFluor 488 at 1:1000 for 1 hour at RT. Counterstain: Phalloidin-iFluor 647 (red) F-Actin stain; Hoechst (blue) nuclear stain at 1:800, 1.6mM for 20 min at RT. (A) Hoechst (blue) nuclear stain. (B) Phalloidin-iFluor 647 (red) F-Actin stain. (C) Cav3.2 Antibody (D) Composite.

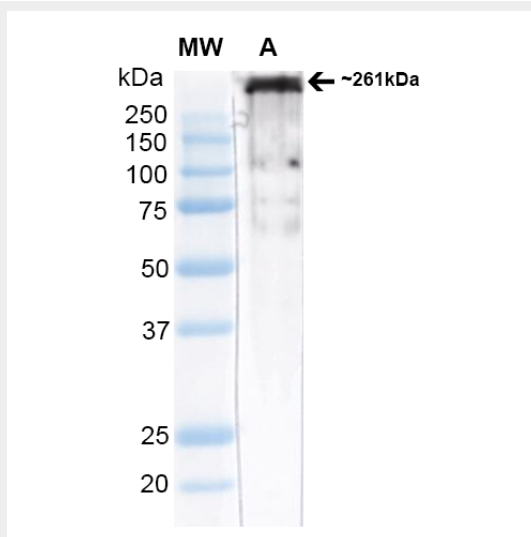


Immunohistochemistry analysis using Mouse Anti-Cav3.2 Calcium Channel Monoclonal Antibody, Clone N55/10 (ASM10181). Tissue: hippocampus. Species: Human. Fixation: Bouin's Fixative and paraffin-embedded. Primary Antibody: Mouse Anti-Cav3.2 Calcium Channel Monoclonal Antibody (ASM10181) at 1:1000 for 1 hour at RT. Secondary Antibody: FITC Goat Anti-Mouse (green) at 1:50

for 1 hour at RT.



Immunohistochemistry analysis using Mouse Anti-Cav3.2 Calcium channel Monoclonal Antibody, Clone N55/10 (ASM10181). Tissue: frozen brain section. Species: Human. Fixation: 10% Formalin Solution for 12-24 hours at RT. Primary Antibody: Mouse Anti-Cav3.2 Calcium channel Monoclonal Antibody (ASM10181) 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  $\mu$ l for 5 minutes at RT.



Western Blot analysis of Rat brain membrane lysate (native) showing detection of ~261 kDa Cav3.2 protein using Mouse Anti-Cav3.2 Monoclonal Antibody, Clone N55/10 (ASM10181). Block: 2% Skim Milk + 2% BSA in TBST. Primary Antibody: Mouse Anti-Cav3.2 Monoclonal Antibody (ASM10181) at 1:1000 for 2 hours at RT. Secondary Antibody: Anti-Mouse: HRP at 1:4000. Predicted/Observed Size: ~261 kDa.

### **Cav3.2 Antibody - Background**

CaV3.2 is a protein which in humans is encoded by the CACNA1H gene. Studies suggest certain mutations in this gene lead to childhood absence epilepsy (1, 2). Studies also suggest that the up-regulations of CaV3.2 may participate in the progression of prostate cancer toward an androgen-independent stage (3).

### **Cav3.2 Antibody - References**

1. Chen Y., et al. (2003) Ann. Neurol. 54(2): 239-43.

2. Khosravani H., et al. (2004) J Biol Chem. 279(11): 9681-9684.
3. Gackiere F., et al. (2008) J Biol Chem. 283(28): 19872.