

**HCN1 Antibody**  
**HCN1 Antibody, Clone S70-28**  
**Catalog # ASM10182**

**Specification**

---

**HCN1 Antibody - Product Information**

|                   |                             |
|-------------------|-----------------------------|
| Application       | <b>IHC, WB</b>              |
| Primary Accession | <a href="#">O9JKBO</a>      |
| Other Accession   | <a href="#">NP_445827.1</a> |
| Host              | <b>Mouse</b>                |
| Isotype           | <b>IgG1</b>                 |
| Reactivity        | <b>Human, Mouse, Rat</b>    |
| Clonality         | <b>Monoclonal</b>           |

**Description**

Mouse Anti-Rat HCN1 Monoclonal IgG1

**Target/Specificity**

Detects ~100kDa. No cross-reactivity against HCN2.

**Other Names**

BCNG-1 Antibody, BCNG1 Antibody, Brain cyclic nucleotide gated channel 1 Antibody, Brain cyclic nucleotide-gated channel 1 Antibody, HAC2 Antibody, HCN1 Antibody, HCN1\_HUMAN Antibody, Hyperpolarization activated cyclic nucleotide gated potassium channel 1 Antibody, Potassium/sodium hyperpolarization activated cyclic nucleotide gated channel 1 Antibody, Potassium/sodium hyperpolarization-activated cyclic nucleotide-gated channel 1 Antibody

**Immunogen**

Fusion protein amino acids 778-910 (C terminus) of rat HCN1

**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-304 was sufficient for detection of HCN1 in 10 µg of rat brain lysate by colorimetric immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.

**Cellular Localization**

Membrane

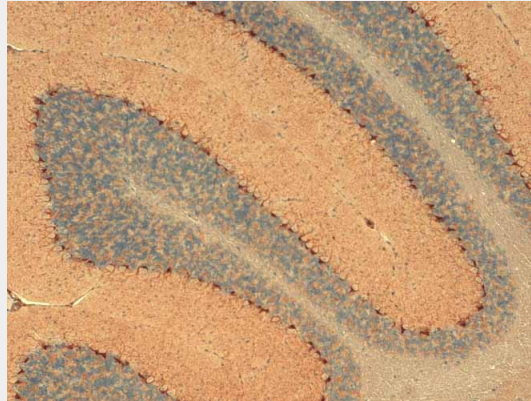
**HCN1 Antibody - Protocols**

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

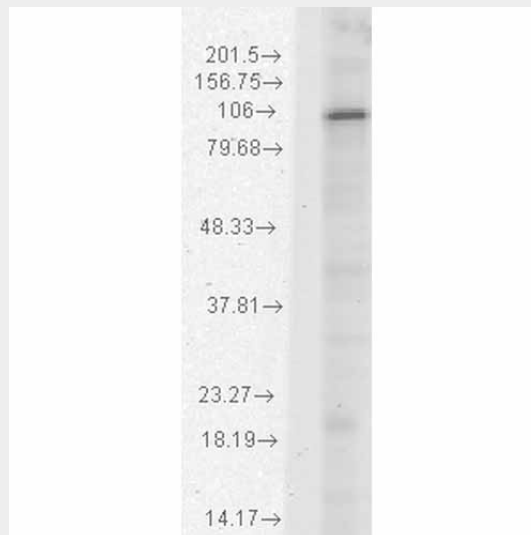
- [Western Blot](#)

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

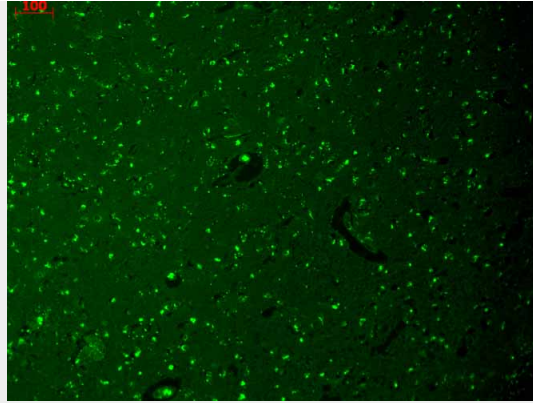
## HCN1 Antibody - Images



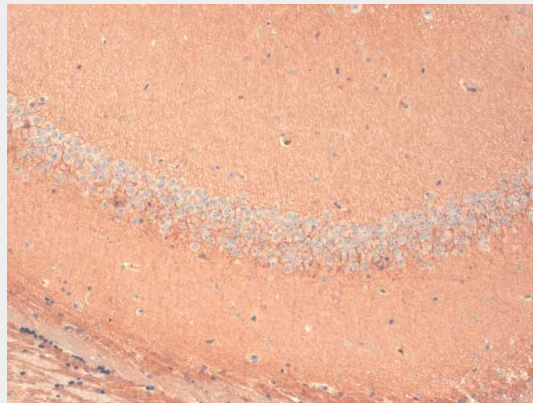
Immunohistochemistry analysis using Mouse Anti-HCN1 Monoclonal Antibody, Clone S70-28 (ASM10182). Tissue: Cerebellum. Species: Mouse. Fixation: 10% Formalin Solution for 12-24 hours at RT. Primary Antibody: Mouse Anti-HCN1 Monoclonal Antibody (ASM10182) at 1:1000 for 1 hour at RT. Secondary Antibody: 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. Localization: Cytoplasmic staining of Purkinje cells.



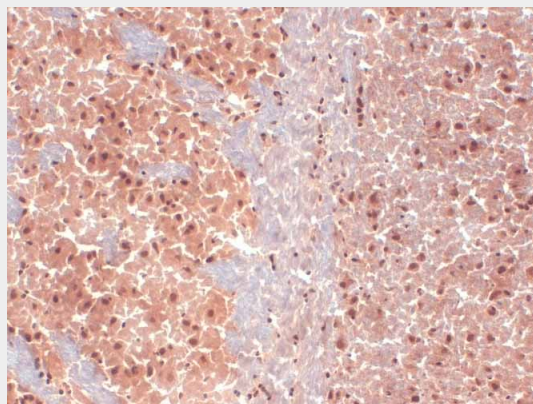
Western Blot analysis of Rat brain membrane lysate showing detection of HCN1 protein using Mouse Anti-HCN1 Monoclonal Antibody, Clone S70-28 (ASM10182). Load: 15  $\mu$ g. Block: 1.5% BSA for 30 minutes at RT. Primary Antibody: Mouse Anti-HCN1 Monoclonal Antibody (ASM10182) at 1:1000 for 2 hours at RT. Secondary Antibody: Sheep Anti-Mouse IgG: HRP for 1 hour at RT.



Immunohistochemistry analysis using Mouse Anti-HCN1 Monoclonal Antibody, Clone S70-28 (ASM10182). Tissue: hippocampus. Species: Human. Fixation: Bouin's Fixative and paraffin-embedded. Primary Antibody: Mouse Anti-HCN1 Monoclonal Antibody (ASM10182) 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-HCN1 Monoclonal Antibody, Clone S70-28 (ASM10182). Tissue: Frozen brain section. Species: Mouse. Fixation: 10% Formalin Solution for 12-24 hours at RT. Primary Antibody: Mouse Anti-HCN1 Monoclonal Antibody (ASM10182) 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. Localization: Neurons.



Immunohistochemistry analysis using Mouse Anti-HCN1 Monoclonal Antibody, Clone S70-28 (ASM10182). Tissue: Frozen brain section. Species: Mouse. Fixation: 10% Formalin Solution for 12-24 hours at RT. Primary Antibody: Mouse Anti-HCN1 Monoclonal Antibody (ASM10182) 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.

### **HCN1 Antibody - Background**

Hyperpolarization-activated cation channels of the HCN gene family, such as HCN1, play a crucial role in the regulatons of cell excitability. Importantly, they contribute to spontaneous rhythmic activity in both the heart and brain (1).

### **HCN1 Antibody - References**

1. Zong X., et al. (2005) J Biol Chem. 280(40): 34224-34232.