

HCN1 Antibody

HCN1 Antibody, Clone S70-28 Catalog # ASM10182

Specification

HCN1 Antibody - Product Information

Application IHC, WB
Primary Accession O9JKBO
Other Accession NP_445827.1
Host Mouse
Isotype IgG1

Reactivity Human, Mouse, Rat

Clonality Monoclonal

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

 $1 \mu g/ml$ of SMC-304 was sufficient for detection of HCN1 in $10 \mu g$ of rat brain lysate by colorimetric immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.

Cellular Localization

Membrane

HCN1 Antibody - Protocols

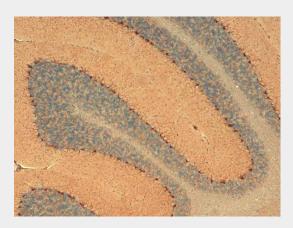
Provided below are standard protocols that you may find useful for product applications.

Western Blot



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

HCN1 Antibody - Images

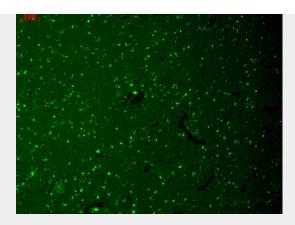


Immunohistochemistry analysis using Mouse Anti-HCN1 Monoclonal Antibody, Clone S70-28 (ASM10182). Tissue: Cerebellum. Species: Mouse. Fixation: 10% Formalin Solution for 12-24 hours at RT. Primary Antibody: Mouse Anti-HCN1 Monoclonal Antibody (ASM10182) at 1:1000 for 1 hour at RT. Secondary Antibody: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

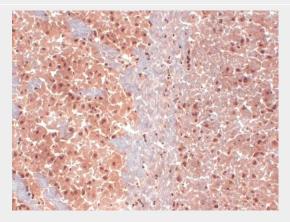




Immunohistochemistry analysis using Mouse Anti-HCN1 Monoclonal Antibody, Clone S70-28 (ASM10182). Tissue: hippocampus. Species: Human. Fixation: Bouin's Fixative and paraffin-embedded. Primary Antibody: Mouse Anti-HCN1 Monoclonal Antibody (ASM10182) at 1:1000 for 1 hour at RT. Secondary Antibody: FITC 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 µl 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



Tel: 858.875.1900 Fax: 858.875.1999

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.

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.