

## Product Datasheet

### HCN1 Antibody (orb67394)

<b>Catalog Number</b>	orb67394
<b>Category</b>	Antibodies
<b>Description</b>	Mouse Anti-Rat HCN1 Monoclonal IgG1
<b>Target</b>	HCN1
<b>Clonality</b>	Recombinant
<b>Species/Host</b>	Mouse
<b>Isotype</b>	IgG1
<b>Conjugation</b>	Unconjugated
<b>Reactivity</b>	Human, Mouse, Rat
<b>Concentration</b>	1 mg/ml
<b>Buffer/Preservatives</b>	PBS pH 7.4, 50% glycerol, 0.09% sodium azide Storage buffer changes when conjugated
<b>Purification</b>	Protein G Purified
<b>Immunogen</b>	Fusion protein amino acids 778-910 (C terminus) of rat HCN1 (Q9JKB0 sequence version 1)
<b>UniProt ID</b>	<b>Q9JKB0</b>
<b>MW</b>	100kDa
<b>Tested applications</b>	AM, IHC, IP, WB
<b>Dilution range</b>	WB (1:1000), IHC-P (1:1000), ICC/IF (1:100)

**Biorbyt Ltd.**

7 Signet Court, Swann Road  
Cambridge  
CB5 8LA  
United Kingdom

Email: [info@biorbyt.com](mailto:info@biorbyt.com), [support@biorbyt.com](mailto:support@biorbyt.com)

Phone: [+44 \(0\)1223 859353](tel:+44(0)1223859353) | Fax: [+1 \(415\) 651-8558](tel:+1(415)651-8558)

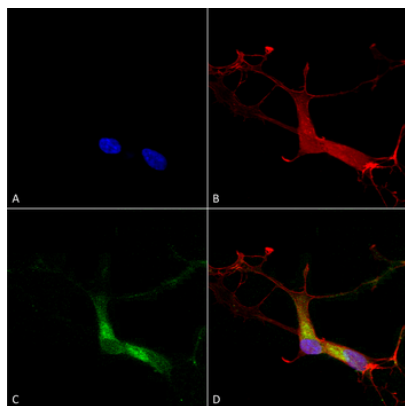
**Biorbyt LLC**

68 TW Alexander Drive  
Research Triangle Park  
Durham  
NC 27713  
United States

Email: [info@biorbyt.com](mailto:info@biorbyt.com), [support@biorbyt.com](mailto:support@biorbyt.com)

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<b>Application notes</b>	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.
<b>Specificity</b>	Detects ~100kDa. No cross-reactivity against HCN2.
<b>Antibody Type</b>	Recombinant Antibody
<b>Clone Number</b>	S70
<b>Storage</b>	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
<b>Note</b>	For research use only
<b>Entrez</b>	<b>84390</b>
<b>NCBI</b>	<b>NP_445827.1</b>
<b>Expiration Date</b>	12 months from date of receipt.



Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-HCN1 Monoclonal Antibody, Clone S70. Tissue: Neuroblastoma cells (SH-SY5Y). Species: Human. Fixation: 4% PFA for 15 min. Primary Antibody: Mouse Anti-HCN1 Monoclonal Antibody at 1:100 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) HCN1 Antibody (D) Composite.

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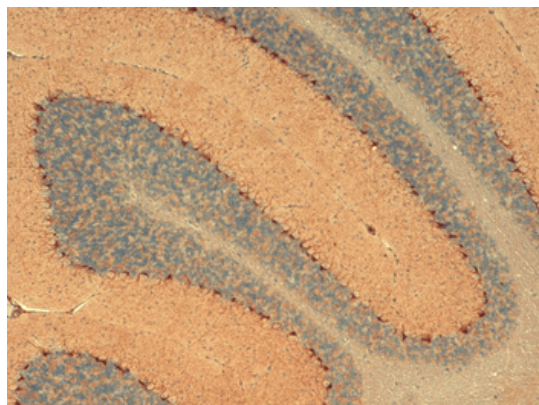
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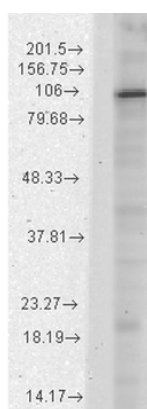
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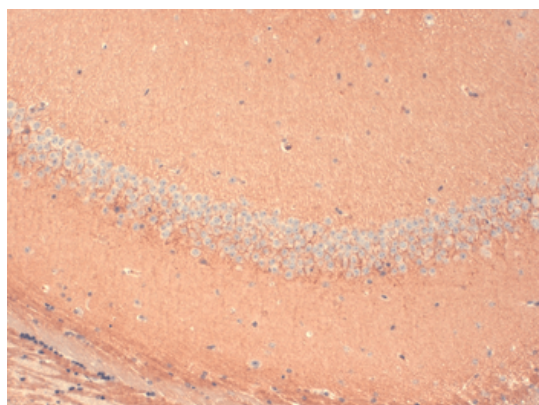
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Immunohistochemistry analysis using Mouse Anti-HCN1 Monoclonal Antibody, Clone S70. Tissue: Cerebellum. Species: Mouse. Fixation: 10% Formalin Solution for 12-24 hours at RT. Primary Antibody: Mouse Anti-HCN1 Monoclonal Antibody at 1:1000 for 1 hour 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. Load: 15  $\mu$ g. Block: 1.5% BSA for 30 minutes at RT. Primary Antibody: Mouse Anti-HCN1 Monoclonal Antibody 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. Tissue: Frozen brain section. Species: Mouse. Fixation: 10% Formalin Solution for 12-24 hours at RT. Primary Antibody: Mouse Anti-HCN1 Monoclonal Antibody 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.

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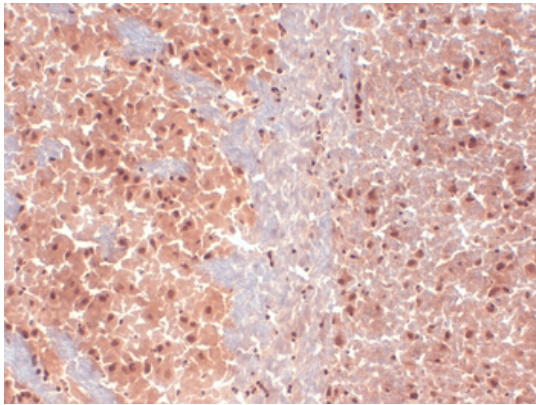
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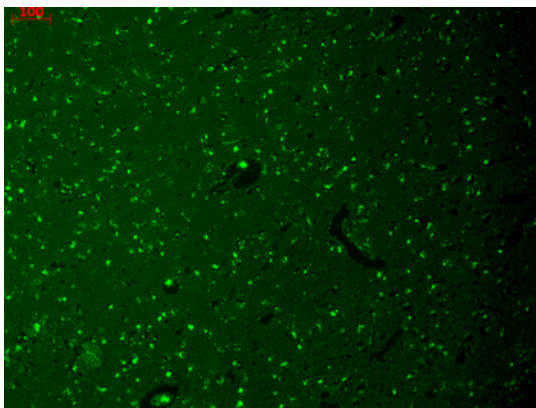
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Immunohistochemistry analysis using Mouse Anti-HCN1 Monoclonal Antibody, Clone S70. Tissue: Frozen brain section. Species: Mouse. Fixation: 10% Formalin Solution for 12-24 hours at RT. Primary Antibody: Mouse Anti-HCN1 Monoclonal Antibody at 1:1000 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.



Immunohistochemistry analysis using Mouse Anti-HCN1 Monoclonal Antibody, Clone S70. Tissue: hippocampus. Species: Human. Fixation: Bouin's Fixative and paraffin-embedded. Primary Antibody: Mouse Anti-HCN1 Monoclonal Antibody at 1:1000 for 1 hour at RT. Secondary Antibody: FITC Goat Anti-Mouse (green) at 1:50 for 1 hour at RT.

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