

UC Davis/NIH NeuroMab Facility

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Anti-HCN1 cyclic nucleotide-gated channel, NeuroMab clone N70/28

Immunogen:

Fusion protein amino acids 778-910 (cytoplasmic C-terminus) of rat HCN1 (also known as potassium/sodium hyperpolarization-activated cyclic nucleotide-gated channel 1, accession number Q9JKB0)

Mouse: 96% identity (128/133 amino acids identical) Human: 90% identity (121/133 amino acids identical)

<50% identity with HCN2, HCN3 and HCN4

Monoclonal antibody info:

Mouse strain: Balb/C Myeloma cell: SP2/0 Mouse Ig Isotype: IgG1

NeuroMab Applications:

Immunoblotting, Immunohistochemistry and

Immunoprecipitation

Species Reactivity: human, mouse, rat

No cross-reactivity against HCN2

MW: 100 kD

Right: adult rat and mouse brain membrane (RBM and MBM, respectively) and transfected cell immunoblot: extracts of RBM, HCN1-KO and -WT

MBM and COS-1 cells transfected with GFP-HCN1, GFP-HCN2 or Kv2.1 plasmids and probed with N70/28 (left panel) or K89/34 TC supe (right panel).

HCN1-WT MBM HCN1-WT MBM HCN1-KO MBM COS-HCN1 COS-HCN2 COS-Kv2.1 COS-HCN1 COS-HCN2 RBM **250** · 148 64 **50** 36 N70/28 K89/34 Anti-Kv2.1 **Anti-HCN1**

Bottom: adult rat cerebellum (left) and hippocampus (right) immunohistochemistry



