

ARG22223 anti-HCN2 antibody [S71-37]

Package: 50 µg
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [S71-37] recognizes HCN2
Tested Reactivity	Hu, Ms, Rat
Tested Application	ICC/IF, IHC-P, IP, WB
Specificity	Detects ~95kDa. No cross-reactivity against HCN1.
Host	Mouse
Clonality	Monoclonal
Clone	S71-37
Isotype	IgG1
Target Name	HCN2
Species	Rat
Immunogen	Fusion protein around aa. 761-863 of Rat HCN2
Conjugation	Un-conjugated
Alternate Names	Potassium/sodium hyperpolarization-activated cyclic nucleotide-gated channel 2; HAC-1; BCNG2; Brain cyclic nucleotide-gated channel 2; BCNG-2

Application Instructions

Application table	Application	Dilution
	ICC/IF	1:100
	IHC-P	1:100
	IP	Assay-dependent
	WB	1:1000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

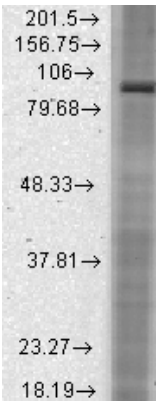
Form	Liquid
Purification	Purification with Protein G.
Buffer	PBS (pH 7.4), 0.09% Sodium azide and 50% Glycerol
Preservative	0.09% Sodium azide
Stabilizer	50% Glycerol
Concentration	1 mg/ml

Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

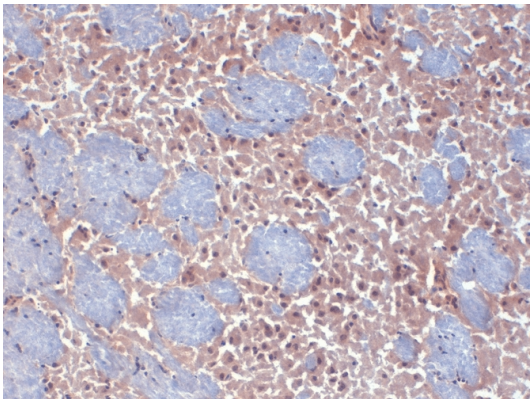
Gene Symbol	Hcn2
Gene Full Name	hyperpolarization activated cyclic nucleotide-gated potassium channel 2
Background	Hyperpolarization-activated cation channels of the HCN gene family, such as HCN2, contribute to spontaneous rhythmic activity in both heart and brain.[supplied by OMIM, Jul 2010]
Function	Hyperpolarization-activated ion channel exhibiting weak selectivity for potassium over sodium ions. Contributes to the native pacemaker currents in heart (If) and in neurons (Ih). Can also transport ammonium in the distal nephron. Produces a large instantaneous current. Modulated by intracellular chloride ions and pH; acidic pH shifts the activation to more negative voltages (By similarity). [UniProt]
Calculated Mw	97 kDa
PTM	Phosphorylation at Ser-668 by PRKG2 shifts the voltage-dependence to more negative voltages, hence counteracting the stimulatory effect of cGMP on gating.
Cellular Localization	Membrane

Images



ARG22223 anti-HCN2 antibody [S71-37] WB image

Western blot: Rat brain membrane lysate stained with ARG22223 anti-HCN2 Antibody [S71-37] at 1:1000 dilution.



ARG22223 anti-HCN2 antibody [S71-37] IHC-Fr image

Immunohistochemistry: 10% Formalin (12-24 hours at RT) fixed Mouse frozen brain section stained with ARG22223 anti-HCN2 Antibody [S71-37] (brown) at 1:1000 dilution (1 hour). Counterstain: Mayer Hematoxylin (purple/blue) nuclear stain at 250-500uL for 5 minutes at RT.