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# Anti-HCN1 Picoband Antibody

Catalog # ABO11901

## Product Information

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|---|---|
| **Application** | WB |
| **Primary Accession** | O60741 |
| **Host** | Rabbit |
| **Reactivity** | Human, Mouse, Rat |
| **Clonality** | Polyclonal |
| **Format** | Lyophilized |
| **Description** | Rabbit IgG polyclonal antibody for Potassium/sodium hyperpolarization-activated cyclic nucleotide-gated channel 1(HCN1) detection. Tested with WB in Human;Mouse;Rat. |
| **Reconstitution** | Add 0.2ml of distilled water will yield a concentration of 500ug/ml. |

## Additional Information

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| **Gene ID** | 348980 |
| **Other Names** | Potassium/sodium hyperpolarization-activated cyclic nucleotide-gated channel 1, Brain cyclic nucleotide-gated channel 1, BCNG-1, HCN1, BCNG1 |
| **Calculated MW** | 98796 |
| **Application Details** | Western blot, 0.1-0.5 □g/ml, Human, Mouse, Rat |
| **Subcellular Localization** | Cell membrane ; Multi-pass membrane protein . |
| **Tissue Specificity** | Detected in brain, in particular in amygdala and hippocampus, while expression in caudate nucleus, corpus callosum, substantia nigra, subthalamic nucleus and thalamus is very low or not detectable. Detected at very low levels in muscle and pancreas. . |
| **Source** | Eukaryota |
| **Protein Name** | Potassium/sodium hyperpolarization-activated cyclic nucleotide-gated channel 1 |
| **Contents** | Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3. |
| **Immunogen** | E.coli-derived human HCN1 recombinant protein (Position: E618-L890). Human HCN1 shares 82% amino acid (aa) sequence identity with both mouse and rat HCN1. |
| **Purification** | Immunogen affinity purified. |

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| **Cross Reactivity** | No cross reactivity with other proteins |
| **Storage** | At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing. |
| **Sequence Similarities** | Belongs to the potassium channel HCN family. |

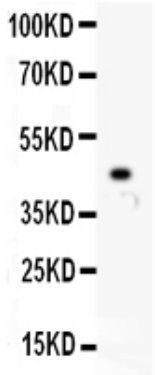
## Protein Information

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| **Name** | HCN1 |
| **Synonyms** | BCNG1 |
| **Function** | Hyperpolarization-activated ion channel that are permeable to sodium and potassium ions (PubMed:15351778, PubMed:28086084). Displays lower selectivity for K(+) over Na(+) ions (PubMed:28086084). Contributes to the native pacemaker currents in heart (If) and in the generation of the I(h) current which controls neuron excitability (PubMed:29936235, PubMed:30351409). Participates in cerebellar mechanisms of motor learning (By similarity). May mediate responses to sour stimuli (By similarity). |
| **Cellular Location** | Cell membrane; Multi-pass membrane protein |
| **Tissue Location** | Detected in brain, in particular in amygdala and hippocampus, while expression in caudate nucleus, corpus callosum, substantia nigra, subthalamic nucleus and thalamus is very low or not detectable. Detected at very low levels in muscle and pancreas |

## Background

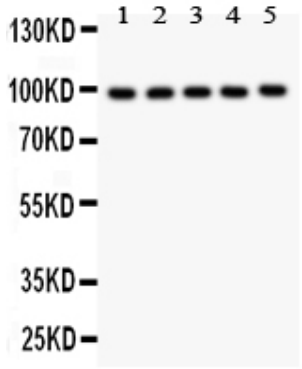
Potassium/sodium hyperpolarization-activated cyclic nucleotide-gated channel 1, also known as HAC-2 or BCNG-1, is a protein that in humans is encoded by the HCN1 gene. It is mapped to 5p12. The membrane protein encoded by this gene is a hyperpolarization-activated cation channel that contributes to the native pacemaker currents in heart and neurons. The encoded protein can homodimerize or heterodimerize with other pore-forming subunits to form a potassium channel. This channel may act as a receptor for sour tastes. Hyperpolarization-activated ion channel exhibiting weak selectivity for potassium over sodium ions. It may mediates responses to sour stimuli.

## Images




Anti- HCN1 antibody, ABO11901, Western blottingAll lanes: Anti HCN1 (ABO11901) at 0.5ug/mlWB: Recombinant Human HCN1 Protein 0.5ngPredicted bind size: 45KDObserved bind size: 45KD

Anti- HCN1 antibody, ABO11901, Western blottingAll lanes: Anti HCN1 (ABO11901) at 0.5ug/mlLane 1: Rat




Brain Tissue Lysate at 50ugLane 2: Mouse Brain Tissue Lysate at 50ugLane 3: HELA Whole Cell Lysate at 40ugLane 4: U87 Whole Cell Lysate at 40ugLane 5: MCF-7 Whole Cell Lysate at 40ugPredicted bind size: 99KDObserved bind size: 99KD

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.