Datasheet for ABIN5518840

anti-HCN2 antibody (C-Term)

2 Images

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Overview

Quantity:	100 µg
Target:	HCN2
Binding Specificity:	AA 682-714, C-Term
Reactivity:	Human, Rat, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This HCN2 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC)

Product Details

Purpose:	Anti-HCN2 Antibody Picoband®
Immunogen:	A synthetic peptide corresponding to a sequence at the C-terminus of human HCN2, identical to the related mouse sequence, and different from the related rat sequence by one amino acid.
Sequence:	VFNNQENAII QEIVKYDREM VQQAELGQRV GLF
Isotype:	IgG
Cross-Reactivity (Details):	No cross-reactivity with other proteins.
Characteristics:	Anti-HCN2 Antibody Picoband® (ABIN5518840). Tested in IHC, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.

Product Details

Purification:	Immunogen affinity purified.

Target Details

Target:	HCN2
Alternative Name:	HCN2 (HCN2 Products)
Background:	Synonyms: Potassium/sodium hyperpolarization-activated cyclic nucleotide-gated channel 2,Brain cyclic nucleotide-gated channel 2,BCNG-2,HCN2,BCNG2, Tissue Specificity: Highly expressed throughout the brain. Detected at low levels in heart. . Background: Potassium/sodium hyperpolarization-activated cyclic nucleotide-gated ion channel 2 is a protein that in humans is encoded by the HCN2 gene. The HCN2 gene is localized on human chromosome 19p13.3 and contains eight exons spanning approximately 27 kb. Hyperpolarization-activated cation channels of the HCN gene family, such as HCN2, contribute to spontaneous rhythmic activity in both heart and brain.
Molecular Weight:	97 kDa
Gene ID:	610

Application Details

Application Notes:	Immunohistochemistry (Paraffin-embedded Section), 0.5-1 µg/mL, Rat, Human Western blot, 0.1-0.5 µg/mL, Mouse, Rat, Human 1. Ludwig, A., Zong, X., Stieber, J., Hullin, R., Hofmann, F., Biel, M. Two pacemaker channels from human heart with profoundly different activation kinetics. EMBO J. 18: 2323-2329, 1999. 2. Santoro B, Liu DT, Yao H, Bartsch D, Kandel ER, Siegelbaum SA, Tibbs GR (May 1998). "Identification of a gene encoding a hyperpolarization-activated pacemaker channel of brain". Cell. 93 (5): 717-29.
Comment:	Antibody can be supported by chemiluminescence kit ABIN921124 in WB, supported by ABIN921231 in IHC(P).
Restrictions:	For Research Use only

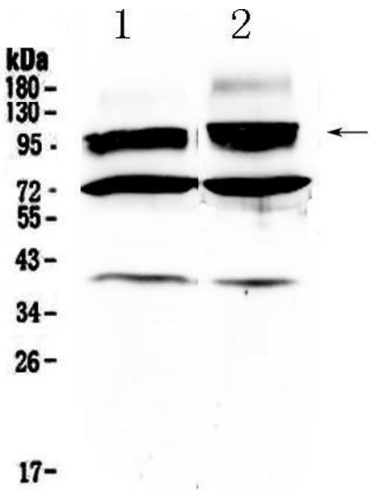
Handling

Format:	Lyophilized
Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Concentration:	500 µg/mL

Handling

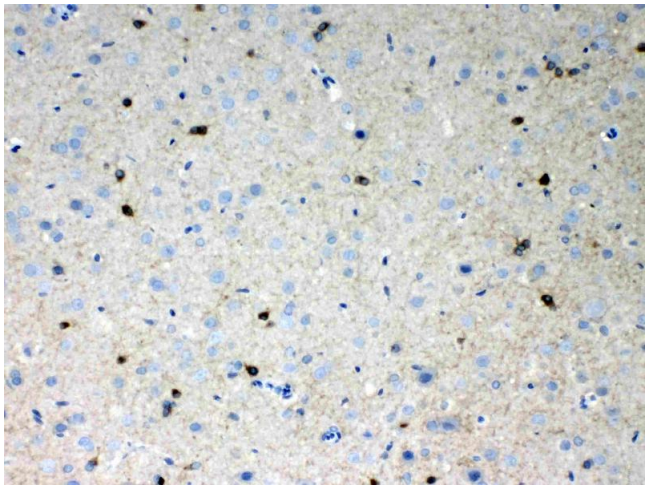
Buffer:	Each vial contains 5 mg BSA, 0.9 mg NaCl, 0.2 mg Na2HPO4, 0.05 mg Sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.

Images



Western Blotting

Image 1. Western blot analysis of HCN2 using anti- HCN2 antibody . Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each Lane was loaded with 50ug of sample under reducing conditions. Lane 1: rat brain tissue lysates, Lane 2: mouse brain tissue lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-HCN2 antigen affinity purified polyclonal antibody (Catalog #) at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for HCN2 at approximately 97KD. The expected band size for HCN2 is at 97KD.



Immunohistochemistry

Image 2. IHC analysis of HCN2 using anti- HCN2 antibody . HCN2 was detected in paraffin-embedded section of rat brain tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1µg/ml rabbit anti- HCN2 Antibody overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

