



## Rabbit Anti-HCN2 + HCN4 antibody

SL11630R

<b>Product Name:</b>	HCN2 + HCN4
<b>Chinese Name:</b>	环化核苷酸调控阳离子Channel protein亚型2/4抗体
<b>Alias:</b>	HCN2+HCN4; HCN2 / HCN4; HCN2+4; HCN2/4; BCNG 2; Brain cyclic nucleotide gated channel 2; HAC 1; HCN 4; HCN 2; Hyperpolarization activated cyclic nucleotide gated potassium channel 4;HCN2 HUMAN; HCN4 HUMAN.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Chicken,Pig,Cow,Rabbit,Sheep,
<b>Applications:</b>	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	97+129kDa
<b>Cellular localization:</b>	The cell membrane
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human HCN2 + HCN4:151-250/889
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	Hyperpolarization activated cation channels of the HCN gene family such as HCN2, contribute to spontaneous rhythmic activity in both heart and brain. HCN2 is a member of a family of pacemaker channels activated by hyperpolarization and regulated by cyclic nucleotides. HCN1 and HCN2 play an important role for motor learning and neuronal integration by cerebellar Purkinje cells; as well as, shaping autonomous activity

of single neurons and the periodicity of network oscillations. HCN2 is highly abundant in mamillary bodies, pontine nucleus, ventral cochlear nucleus, and nucleus of the trapezoid body. HCN4 is another member of the family of hyperpolarization activated and cyclic nucleotide gated channels. HCN currents have been linked to pacemaker activity in the heart and brain, resting potential control, as well as neuronal plasticity. It has been shown that HCN4 channels function as receptors for sour taste, and are associated with pacemaker potential generation in the sinoatrial node.

**Function:**

Hyperpolarization-activated ion channel exhibiting weak selectivity for potassium over sodium ions. Contributes to the native pacemaker currents in heart (I<sub>f</sub>) and in neurons (I<sub>h</sub>). Produces a large instantaneous current. Activated by cAMP. Modulated by intracellular chloride ions and pH; acidic pH shifts the activation to more negative voltages

**Subunit:**

The potassium channel is probably composed of a homo- or heterotetrameric complex of pore-forming subunits. Heteromultimer with HCN1. Interacts with KCNE2

**Subcellular Location:**

Membrane; Multi pass membrane protein.

**Tissue Specificity:**

Highly expressed throughout the brain. Detected at low levels in heart.

**Similarity:**

Belongs to the potassium channel HCN family.  
Contains 1 cyclic nucleotide-binding domain.

**SWISS:**

Q9UL51

**Gene ID:**

610

**Database links:**

[Entrez Gene: 10021](#)Human

[Entrez Gene: 610](#)Human

[Entrez Gene: 15166](#)Mouse

[Entrez Gene: 330953](#)Mouse

[Entrez Gene: 114244](#)Rat

[Entrez Gene: 59266](#)Rat

[Oimim: 602781](#)Human

[Oimim: 605206](#)Human

[SwissProt: Q9UL51](#)Human

[SwissProt: Q9Y3Q4](#)Human

[SwissProt: O70507](#)Mouse

[SwissProt: O88703](#)Mouse

[SwissProt: Q9JKA7](#)Rat

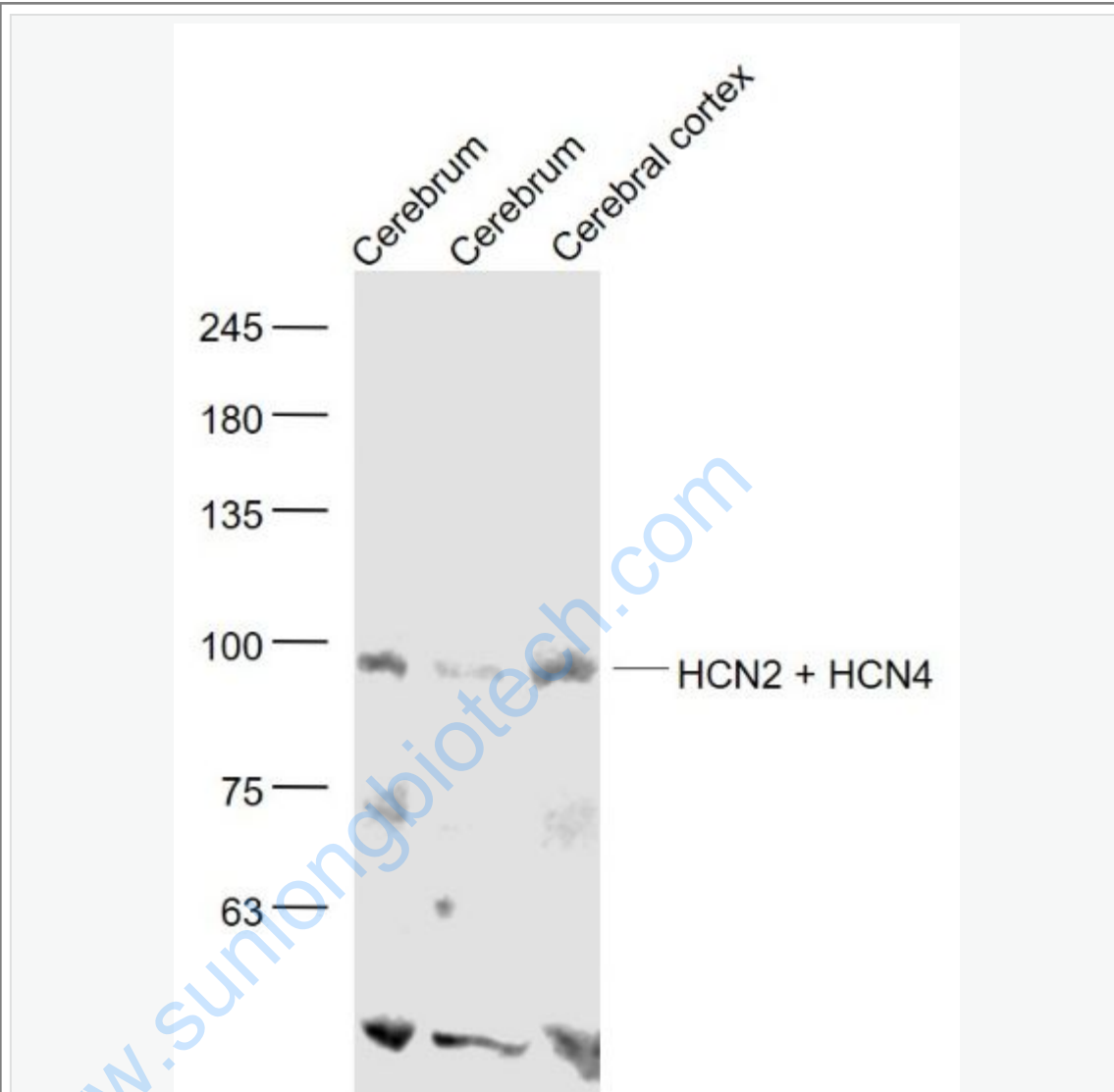
[SwissProt: Q9JKA9](#)Rat

**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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Picture:



Sample:

Cerebrum (Mouse) Lysate at 40 ug

Cerebrum (Rat) Lysate at 40 ug

Cerebral cortex (Mouse) Lysate at 40 ug

Primary: Anti- HCN2 + HCN4 (SL11630R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 97/129 kD

	Observed band size: 97 kD
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