



## Rabbit Anti-HCN2 antibody

SL20167R

<b>Product Name:</b>	HCN2
<b>Chinese Name:</b>	钾/钠超极化激活环核苷酸门控Channel protein2抗体
<b>Alias:</b>	BCNG-2; BCNG2; HCN 2; Brain cyclic nucleotide gated channel 2; Brain cyclic nucleotide-gated channel 2; HAC1; Hcn2; HCN2_HUMAN; Potassium/sodium hyperpolarization-activated cyclic nucleotide-gated channel 2.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,
<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>	97kDa
<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 HCN2:61-150/889
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	Preservative: 15mM Sodium Azide, Constituents: 1% BSA, 0.01M PBS, pH 7.4
<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, cyclic nucleotide-binding channels (HCN) are voltage-gated cation channels that are activated by direct binding of intracellular cyclic nucleotides. The HCN family consists of four members (HCN1–4), each with a core transmembrane segment domain and a carboxy-terminal 120 amino-acid cyclic nucleotide-binding domain motif (1). HCN channels are expressed in the brain, heart,

thalamus and testis (1). The pacemaker properties of HCN channels contribute to spontaneous rhythmic activity in the brain and heart (1). The genes encoding human HCN1 and HCN2 map to chromosomes 5 and 19p13.3, respectively (2,3). The genes encoding HCN3 and HCN4 map to chromosomes 1q21.3 and 15q24-q25, respectively (4,5).

**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: 610](#)Human

[Entrez Gene: 15166](#)Mouse

[Entrez Gene: 114244](#)Rat

[Omim: 602781](#)Human

[SwissProt: Q9UL51](#)Human

[SwissProt: O88703](#)Mouse

[SwissProt: Q9JKA9](#)Rat

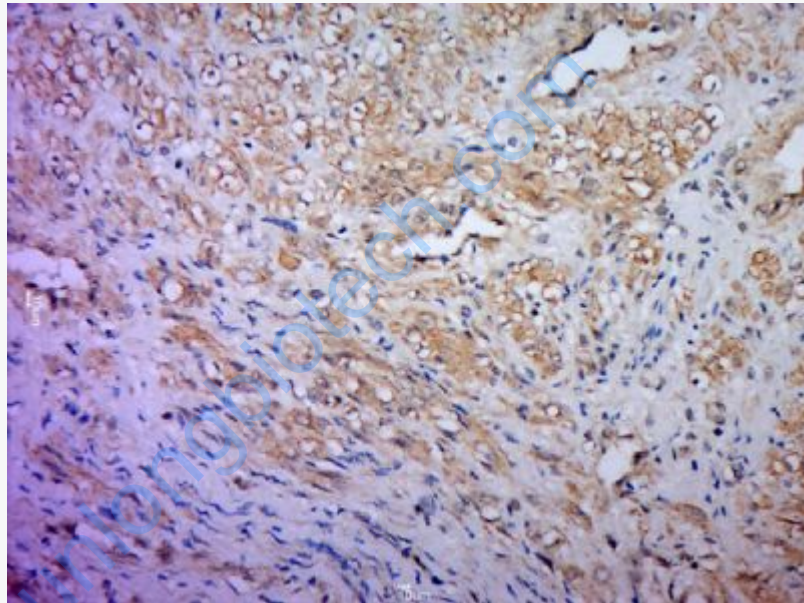
[Unigene: 124161](#)Human

[Unigene: 12956](#)Mouse

[Unigene: 224995](#)Rat

**Important Note:**

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



**Picture:**

Paraformaldehyde-fixed, paraffin embedded (Human cervical cancer); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (HCN2) Polyclonal Antibody, Unconjugated (SL20167R) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.