## For Research Use Only

# HCN2 Polyclonal antibody

Catalog Number: 55245-1-AP 10 Publications



**Purification Method:** 

WB 1:500-1:1000

protein lysate

IHC 1:20-1:200

IF-P 1:50-1:500

Antigen affinity purification

IP 0.5-4.0 ug for 1.0-3.0 mg of total

Recommended Dilutions:

**Basic Information** 

Catalog Number: GenBank Accession Number:

55245-1-AP NM\_001194 GeneID (NCBI): Size: 150ul , Concentration: 1000  $\mu g/ml$  by 610

Nanodrop and 553 µg/ml by Bradford UNIPROT ID: Q9UL51

method using BSA as the standard; Source:

Full Name: Rabbit hyperpolarization activated cyclic

Isotype:

Calculated MW: 97 kDa

Observed MW: 97-110 kDa

**Applications** 

**Tested Applications:** WB, IHC, IF-P, IP, ELISA

**Cited Applications:** WB, IHC, IF Species Specificity:

human, mouse, rat **Cited Species:** human, mouse, rat

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB: mouse brain tissue, Jurkat cells

IP: mouse brain tissue.

IHC: human heart tissue, human brain tissue

IF-P: mouse heart tissue,

# **Background Information**

HCN2, also named as BCNG2, belongs to the potassium channel HCN family. It 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). HCN2 produces a large instantaneous current. It is activated by cAMP. HCN2 is modulated by intracellular chloride ions and pH; acidic pH shifts the activation to more negative voltages. This antibody is specific to HCN2.

nucleotide-gated potassium channel

#### **Notable Publications**

| Author        | Pubmed ID | Journal        | Application |
|---------------|-----------|----------------|-------------|
| Xiaoyu Liu    | 32165274  | Brain Res Bull | WB,IHC      |
| Chandong Ding | 28962131  | Exp Ther Med   | WB          |
| Yi Yan        | 36538279  | Neurosci Bull  | WB          |

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

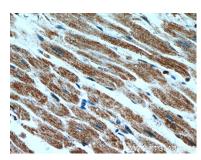
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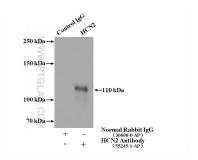
### **Selected Validation Data**



mouse brain tissue were subjected to SDS PAGE followed by western blot with 55245-1-AP (HCN2 antibody) at dilution of 1:800 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffinembedded human heart using 55245-1-AP (HCN2 antibody) at dilution of 1:50 (under 40x lens).



IP result of anti-HCN2 (IP:55245-1-AP, 4ug; Detection:55245-1-AP 1:800) with mouse brain tissue lysate 4000ug.

Immunofluorescent analysis of (4% PFA) fixed mouse heart tissue using HCN2 antibody (55245-1-AP) at dilution of 1:200 and CoraLite®594-Conjugated Goat Anti-Rabbit IgG(H+L).