For Research Use Only

## HCN2 Recombinant antibody, PBS Only (Detector)

Catalog Number:84308-3-PBS



**Purification Method:** 

Protein A purfication

CloneNo.:

241601E10

**Basic Information** 

Catalog Number: GenBank Accession Number:

84308-3-PBS NM\_001194

Size: GeneID (NCBI): 100ug , Concentration: 1 mg/ml by 610

Nanodrop; UNIPROT ID:
Source: Q9UL51
Rabbit Full Name:

 Isotype:
 hyperpolarization activated cyclic

 IgG
 nucleotide-gated potassium channel

Immunogen Catalog Number: 2

AG34038 Calculated MW:

97 kDa Observed MW: 110 kDa

**Applications** 

**Tested Applications:** 

WB, Sandwich ELISA, Indirect ELISA, Sample test

Species Specificity: human, mouse, rat

## **Product Information**

84308-3-PBS targets HCN2 as part of a matched antibody pair:

MP00160-2: 84308-4-PBS capture and 84308-3-PBS detection (validated in Sandwich ELISA)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

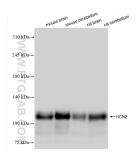
## **Background Information**

HCN2, also named as BCNG2, belongs to the potassium channel HCN family. The molecular weight of immature HCN2 is 90 kDa, and the protein is about 120 kDa after n-terminal glycosylation. It has been found that 60 kDa of HCN2 protein can be identified in mouse heart samples. Although all protein isolation steps were handled on ice and in the presence of protease inhibitors to reduce protease-dependent effects and to minimize protein degradation, it is certainly possible that the presence of the 60 kDa HCN2 protein in the heart samples does, in fact, reflect protein degradation. (PMID:21796099, PMID: 19574228)

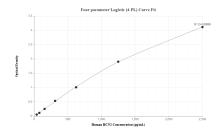
Storage

Storage: Store at -80°C. Storage Buffer: PBS Only

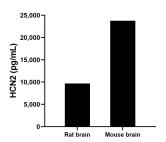
## **Selected Validation Data**



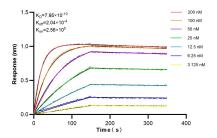
Various lysates were subjected to SDS PAGE followed by western blot with 84308-3-RR (HCN2 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 84308-3-PBS in a different storage buffer formulation.



Sandwich ELISA standard curve of MP00160-2, Human HCN2 Recombinant Matched Antibody Pair -PBS only. 84308-4-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Ag34038. 84308-3-PBS was HRP conjugated as the detection antibody. Range: 39.1-2500 pg/mL



The mean HCN2 concentration was determined to be 9,765.2 ng/mL in rat brain tissue extract based on a 1.6 mg/mL extract load and 23,767.3 ng/mL in mouse brain tissue extract based on a 2.0 mg/mL extract load.



Biolayer interferometry (BLI) kinetic assays of 84308-3-RR against Human HCN2 were performed. The affinity constant is 0.795 nM.