

### KCNJ4 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP12298a

### **Specification**

### KCNJ4 Antibody (N-term) - Product Information

Application WB,E
Primary Accession P48050

Other Accession <u>P52190</u>, <u>P52189</u>, <u>NP 690607.1</u>, <u>NP 004972.1</u>

Reactivity
Predicted
Mouse, Rat
Host
Clonality
Polyclonal
Isotype
Calculated MW
Antigen Region
Human
Mouse, Rat
Rabbit
Rabbit
Rabbit
Polyclonal
Rabbit IgG
1-30

## KCNJ4 Antibody (N-term) - Additional Information

#### **Gene ID 3761**

#### **Other Names**

Inward rectifier potassium channel 4, HIRK2, HRK1, Hippocampal inward rectifier, HIR, Inward rectifier K(+) channel Kir23, IRK-3, Potassium channel, inwardly rectifying subfamily J member 4, KCNI4, IRK3

### Target/Specificity

This KCNJ4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human KCNJ4.

# **Dilution**

WB~~1:1000

### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

KCNJ4 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

### KCNJ4 Antibody (N-term) - Protein Information

### Name KCNJ4



### **Synonyms IRK3**

**Function** Inward rectifier potassium channels are characterized by a greater tendency to allow potassium to flow into the cell rather than out of it. Their voltage dependence is regulated by the concentration of extracellular potassium; as external potassium is raised, the voltage range of the channel opening shifts to more positive voltages. The inward rectification is mainly due to the blockage of outward current by internal magnesium. Can be blocked by extracellular barium and cesium (By similarity).

### **Cellular Location**

Cell membrane; Multi-pass membrane protein. Postsynaptic cell membrane; Multi-pass membrane protein. Cytoplasmic vesicle membrane. Note=TAX1BP3 binding promotes dissociation of KCNJ4 from LIN7 famaly members and KCNJ4 internalization.

#### **Tissue Location**

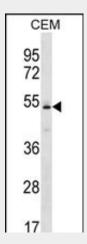
Heart, skeletal muscle, and several different brain regions including the hippocampus

### KCNJ4 Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# KCNJ4 Antibody (N-term) - Images



KCNJ4 Antibody (N-term) (Cat. #AP12298a) western blot analysis in CEM cell line lysates (35ug/lane). This demonstrates the KCNJ4 antibody detected the KCNJ4 protein (arrow).

### KCNJ4 Antibody (N-term) - Background

Several different potassium channels are known to be involved with electrical signaling in the nervous system. One class is activated by depolarization whereas a second class is not. The





latter are referred to as inwardly rectifying K+ channels, and they have a greater tendency to allow potassium to flow into the cell rather than out of it. This asymmetry in potassium ion conductance plays a key role in the excitability of muscle cells and neurons. The protein encoded by this gene is an integral membrane protein and member of the inward rectifier potassium channel family. The encoded protein has a small unitary conductance compared to other members of this protein family. Two transcript variants encoding the same protein have been found for this gene. [provided by RefSeq].

## KCNJ4 Antibody (N-term) - References

Yokoyama, K., et al. Nephron Clin Pract 115 (4), C237-C243 (2010): Yan, X., et al. J. Mol. Biol. 392(4):967-976(2009)
He, Y., et al. FEBS Lett. 582(15):2338-2342(2008)
Ji, W., et al. Nat. Genet. 40(5):592-599(2008)
Ureche, O.N., et al. Cell. Physiol. Biochem. 21 (5-6), 347-356 (2008):