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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	P52190, P52189, NP_690607.1, NP_004972.1
Reactivity	**Human**
Predicted	**Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**49500**
Antigen Region	**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, KCNJ4, 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
E~~Use at an assay dependent concentration.

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

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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.

Cellular Location
Cell membrane {ECO:0000250|UniProtKB:P52189}; Multi-pass membrane protein. Postsynaptic cell membrane {ECO:0000250|UniProtKB:P52189}; Multi-pass membrane protein. Cytoplasmic vesicle membrane {ECO:0000250|UniProtKB:P52189}. Note=TAX1BP3 binding promotes dissociation of KCNJ4 from LIN7 famaly members and KCNJ4 internalization. {ECO:0000250|UniProtKB:P52189}

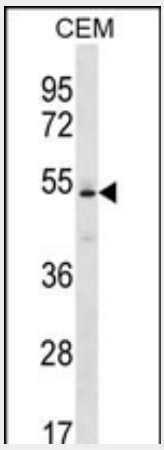
Tissue Location
Heart, skeletal muscle, and several different brain regions including the hippocampus

KCNJ4 Antibody (N-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- 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)
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