10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

KCNJ4 Antibody (N-term) Blocking peptide

Synthetic peptide
Catalog # BP12298a

Specification

KCNJ4 Antibody (N-term) Blocking peptide - Product Information

Primary Accession P48050

KCNJ4 Antibody (N-term) Blocking peptide - 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

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

KCNJ4 Antibody (N-term) Blocking peptide - 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.

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) Blocking peptide - Protocols

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

- Blocking Peptides

KCNJ4 Antibody (N-term) Blocking peptide - Images

KCNJ4 Antibody (N-term) Blocking peptide - Background

Several different potassium channels are known to beinvolved with electrical signaling in the nervous system. One classis activated by depolarization whereas a second class is not. Thelatter are referred to as inwardly rectifying K+ channels, and theyhave a greater tendency to allow potassium to flow into the cellrather than out of it. This asymmetry in potassium ion conductanceplays a key role in the excitability of muscle cells and neurons.The protein encoded by this gene is an integral membrane proteinand member of the inward rectifier potassium channel family. Theencoded protein has a small unitary conductance compared to othermembers of this protein family. Two transcript variants encodingthe same protein have been found for this gene. [provided byRefSeq].

KCNJ4 Antibody (N-term) Blocking peptide - 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) :