

KCNJ1 Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP19000b**Specification**

KCNJ1 Antibody (C-term) Blocking Peptide - Product InformationPrimary Accession [P48048](#)**KCNJ1 Antibody (C-term) Blocking Peptide - Additional Information****Gene ID** 3758**Other Names**

ATP-sensitive inward rectifier potassium channel 1, ATP-regulated potassium channel ROM-K, Inward rectifier K(+) channel Kir11, Potassium channel, inwardly rectifying subfamily J member 1, KCNJ1, ROMK1

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.

KCNJ1 Antibody (C-term) Blocking Peptide - Protein Information**Name** KCNJ1**Synonyms** ROMK1**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. This channel is activated by internal ATP and can be blocked by external barium. In the kidney, probably plays a major role in potassium homeostasis.

Cellular Location

Cell membrane; Multi-pass membrane protein. Note=Phosphorylation at Ser-44 by SGK1 is necessary for its expression at the cell membrane.

Tissue Location

In the kidney and pancreatic islets. Lower levels in skeletal muscle, pancreas, spleen, brain, heart and liver

KCNJ1 Antibody (C-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

KCNJ1 Antibody (C-term) Blocking Peptide - Images

KCNJ1 Antibody (C-term) Blocking Peptide - Background

Potassium channels are present in most mammalian cells, where they participate in a wide range of physiologic responses. The protein encoded by this gene is an integral membrane protein and inward-rectifier type potassium channel. It is activated by internal ATP and probably plays an important role in potassium homeostasis. The encoded protein has a greater tendency to allow potassium to flow into a cell rather than out of a cell. Mutations in this gene have been associated with antenatal Bartter syndrome, which is characterized by salt wasting, hypokalemic alkalosis, hypercalciuria, and low blood pressure. Multiple transcript variants encoding different isoforms have been found for this gene.

KCNJ1 Antibody (C-term) Blocking Peptide - References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010) Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :Yokoyama, K., et al. Nephron Clin Pract 115 (4), C237-C243 (2010) :Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009) Lin, D.H., et al. J. Biol. Chem. 284(43):29614-29624(2009)