

KCNJ1 Antibody (C-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP19000b**Specification**

KCNJ1 Antibody (C-term) - Product Information

Application	WB,E
Primary Accession	P48048
Other Accession	NP_722449.2
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	44795
Antigen Region	345-374

KCNJ1 Antibody (C-term) - 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

Target/Specificity

This KCNJ1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 345-374 amino acids from the C-terminal region of human KCNJ1.

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

KCNJ1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

KCNJ1 Antibody (C-term) - 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

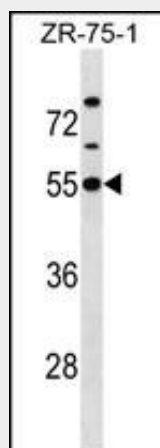
In the kidney and pancreatic islets. Lower levels in skeletal muscle, pancreas, spleen, brain, heart and liver

KCNJ1 Antibody (C-term) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

KCNJ1 Antibody (C-term) - Images



KCNJ1 Antibody (C-term) (Cat. #AP19000b) western blot analysis in ZR-75-1 cell line lysates (35ug/lane). This demonstrates the KCNJ1 antibody detected the KCNJ1 protein (arrow).

KCNJ1 Antibody (C-term) - 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) - 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)