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Rabbit Anti-phospho-KCNJ1 (Ser44) antibody

SL12176R

Product Name:	phospho-KCNJ1 (Ser44)
Chinese Name:	磷酸化细胞内流钾Channel proteinKCNJ1抗体
Alias:	KCNJ1 (phospho S44); KCNJ1 (phospho S44); p-KCNJ1 (phospho S44); KCNJ1 (phospho Ser44); p-KCNJ1 (Ser44); p-ROM-K(phospho S44); KCNJ1 (phospho S25)(mouse); p-KCNJ1 (phospho S25)(mouse); KCNJ1 (phospho Ser25)(mouse); p-KCNJ1 (Ser25)(mouse); p-ROM-K(phospho S25)(mouse); ROM K; ROM-K; inwardly rectifying subfamily J member 1; ATP regulated potassium channel ROM K; ATP sensitive inward rectifier potassium channel 1; ATP-regulated potassium channel ROM-K; ATP-sensitive inward rectifier potassium channel 1; Inward rectifier K(+) channel Kir1.1; inwardly rectifying K+ channel; IRK1_HUMAN; KCNJ 1; KCNJ; Kcnj1; Kir 1.1; Kir1.1; Potassium channel; Potassium channel inwardly rectifying subfamily J member 1; potassium inwardly-rectifying channel J1; ROMK 1; ROMK 2; ROMK; ROMK1; ROMK2.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Horse,Sheep,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	45kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthesised phosphopeptide derived from human KCNJ1 around the phosphorylation site of Ser44:LV(p-S)KD
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.

Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	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. [provided by RefSeq, Jul 2008]. **Function:** In the kidney, probably plays a major role in potassium homeostasis. 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. **Subunit:** Interacts with SGK1 and SLC9A3R2/NHERF2. **Subcellular Location:** Membrane; Multi-pass membrane protein. **Tissue Specificity:** In the kidney and pancreatic islets. Lower levels in skeletal muscle, pancreas, spleen, brain, heart and liver. **Post-translational modifications:** Phosphorylation at Ser-44 by SGK1 is necessary for its expression at the cell membrane. **DISEASE:** Defects in KCNJ1 are the cause of Bartter syndrome type 2 (BS2) [MIM:241200]; also termed hyperprostanglandin E syndrome 2. BS refers to a group of autosomal recessive disorders characterized by impaired salt reabsorption in the thick ascending loop of Henle with pronounced salt wasting, hypokalemic metabolic alkalosis, and varying degrees of hypercalciuria. BS2 is a life-threatening condition beginning in utero, with marked fetal polyuria that leads to polyhydramnios and premature delivery. Another hallmark of BS2 is a marked hypercalciuria and, as a secondary consequence, the

development of nephrocalcinosis and osteopenia.

Similarity:
Belongs to the inward rectifier-type potassium channel (TC 1.A.2.1) family. KCNJ1 subfamily.

SWISS:
P48048

Gene ID:
3758

Database links:

Entrez Gene: 3758Human

Entrez Gene: 56379Mouse

Entrez Gene: 24521Rat

Omim: 600359Human

SwissProt: P48048Human

SwissProt: O88335Mouse

SwissProt: P35560Rat

Unigene: 527830Human

Unigene: 390168Mouse

Unigene: 22609Rat

Important Note:
This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.