ROM-K (Phospho Ser44) Rabbit pAb

CatalogNo: YP1160

Key Features

Host Species
- Rabbit

Reactivity
- Human,Mouse,Rat

Applications
- IHC,IF,ELISA

MW
- 45kD (Calculated)

Isotype
- IgG

Recommended Dilution Ratios

IHC 1:100-1:300
IF 1:200-1:1000
ELISA 1:5000
Not yet tested in other applications.

Storage

Storage*	-15°C to -25°C/1 year(Do not lower than -25°C)
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Basic Information

Clonality	Polyclonal

Immunogen Information

Immunogen	The antiserum was produced against synthesized peptide derived from human ROMK/Kir1.1 around the phosphorylation site of Ser44/25. AA range:11-60
Specificity	Phospho-ROM-K (S44) Polyclonal Antibody detects endogenous levels of ROM-K protein only when phosphorylated at S44.The name of modified sites may be influenced by many factors, such as species (the modified site was not originally found in human samples) and the change of protein sequence (the previous protein sequence is incomplete, and the protein sequence may be prolonged with the development of protein sequencing technology). When naming, we will use the "numbers" in historical reference to keep the sites consistent with the reports. The antibody binds to the following modification sequence (lowercase letters are modification sites):LVsKD

Target Information

Gene name KCNJ1

Protein Name ATP-sensitive inward rectifier potassium channel 1

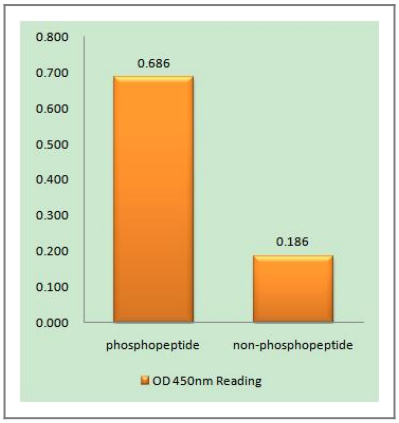
Organism	Gene ID	UniProt ID
Human	3758;	P48048;
Mouse	56379;	O88335;
Rat	24521;	P35560;

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

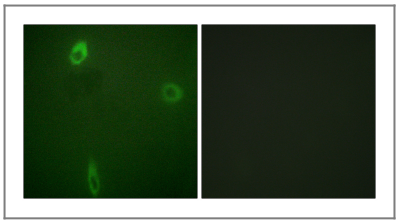
Tissue specificity In the kidney and pancreatic islets. Lower levels in skeletal muscle, pancreas, spleen, brain, heart and liver.

Function 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.,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.,similarity:Belongs to the inward rectifier-type potassium channel family.,tissue specificity:In the kidney and pancreatic islets. Lower levels in skeletal muscle, pancreas, spleen, brain, heart and liver.,

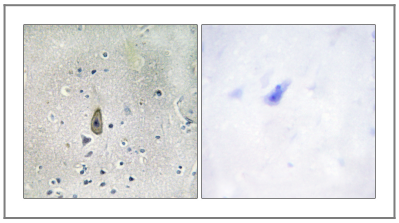
Validation Data



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using ROMK/Kir1.1 (Phospho-Ser44/25) Antibody



Immunofluorescence analysis of A549 cells, using ROMK/Kir1.1 (Phospho-Ser44/25) Antibody. The picture on the right is blocked with the phospho peptide.



Immunohistochemistry analysis of paraffin-embedded human brain, using ROMK/Kir1.1 (Phospho-Ser44/25) Antibody. The picture on the right is blocked with the phospho peptide.

Contact information

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Please scan the QR code to access additional product information: **ROM-K (Phospho Ser44) Rabbit pAb**