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

GIRK1/KCNJ3 Rabbit pAb

GIRK1/KCNJ3 Rabbit pAb
Catalog # AP52214

Product Information

Application	WB
Primary Accession	P48549
Reactivity	Mouse, Rat
Predicted	Human, Dog, Pig, Rabbit, Guinea Pig
Host	Rabbit
Clonality	Polyclonal
Calculated MW	56603
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human GIRK1
Epitope Specificity	81-180/501
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Membrane; Multi-pass membrane protein.
SIMILARITY	Belongs to the inward rectifier-type potassium channel (TC 1.A.2.1) family. KCNJ3 subfamily.
SUBUNIT	Associates with GIRK2, GIRK3 or GIRK4 to form a G-protein activated heteromultimer pore-forming unit. The resulting inward current is much larger.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	This potassium channel is controlled by G proteins. 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 receptor plays a crucial role in regulating the heartbeat.

Additional Information

Gene ID	3760
Other Names	G protein-activated inward rectifier potassium channel 1, GIRK-1, Inward rectifier K(+) channel Kir3.1, Potassium channel, inwardly rectifying subfamily J member 3, KCNJ3, GIRK1
Dilution	WB=1:500-2000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.

Protein Information

Name	KCNJ3
Synonyms	GIRK1
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 potassium channel is controlled by G proteins (PubMed:8804710, PubMed:8868049). This receptor plays a crucial role in regulating the heartbeat (By similarity).
Cellular Location	Membrane; Multi-pass membrane protein

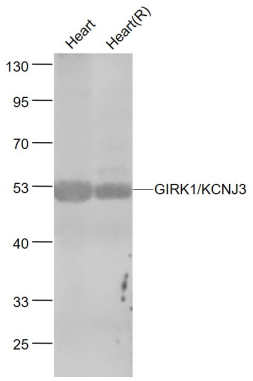
Background

This potassium channel is controlled by G proteins. 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 receptor plays a crucial role in regulating the heartbeat.

References

Chan K.W.,et al.J. Gen. Physiol. 107:381-397(1996).
Schoots O.,et al.Brain Res. Mol. Brain Res. 39:23-30(1996).
Wagner V.,et al.Submitted (OCT-2009) to the EMBL/GenBank/DDBJ databases.
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Hillier L.W.,et al.Nature 434:724-731(2005).

Images



Sample:
Heart (Mouse) Lysate at 40 ug
Heart (Rat) Lysate at 40 ug
Primary: Anti- GIRK1'KCNJ3 (AP52214) at 1/1000 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 55 kD
Observed band size: 53 kD