

# Rabbit Anti-GIRK1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP52214

### **Product Information**

Application WB, E Primary Accession P48549

**Reactivity** Human, Mouse, Rat, Dog

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 KGA; GIRK1; KIR3.1; 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

**Dilution** WB=1:500-2000,ELISA=1:5000-10000

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

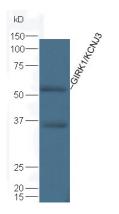
# **Background**

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**



Mouse kidney lysate probed with Rabbit Anti-GIRK1 Polyclonal Antibody (AP52214) at 1:300 overnight in 4°C. Followed by conjugation to the secondary antibody at 1:5000 90min in 37°C

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.