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

Goat Anti-GIRK2 / KCNJ6 Antibody

Peptide-affinity purified goat antibody
Catalog # AF1481a

Specification

Goat Anti-GIRK2 / KCNJ6 Antibody - Product Information

Application	**WB, E**
Primary Accession	P48051
Other Accession	NP_002231, 3763, 16522 (mouse), 25743 (rat)
Reactivity	**Human**
Predicted	**Mouse, Rat**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**48451**

Goat Anti-GIRK2 / KCNJ6 Antibody - Additional Information

Gene ID 3763

Other Names
G protein-activated inward rectifier potassium channel 2, GIRK-2, BIR1, Inward rectifier K(+) channel Kir3.2, KATP-2, Potassium channel, inwardly rectifying subfamily J member 6, KCNJ6, GIRK2, KATP2, KCNJ7

Dilution
WB~~1:1000
E~~N/A

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat Anti-GIRK2 / KCNJ6 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-GIRK2 / KCNJ6 Antibody - Protein Information

Name KCNJ6

Synonyms GIRK2, KATP2, KCNJ7

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 may be involved in the regulation of insulin secretion by glucose and/or neurotransmitters acting through G-protein-coupled receptors.

Cellular Location
Membrane; Multi-pass membrane protein

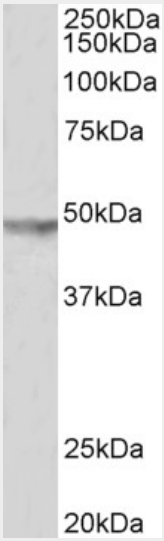
Tissue Location
Most abundant in cerebellum, and to a lesser degree in islets and exocrine pancreas.

Goat Anti-GIRK2 / KCNJ6 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Goat Anti-GIRK2 / KCNJ6 Antibody - Images



AF1481a (2 µg/ml) staining of Human Brain (Substantia Nigra) lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-GIRK2 / KCNJ6 Antibody - 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. The encoded protein, which has a greater tendency to allow potassium to flow into a cell rather than out of a cell, is controlled by G-proteins and may be involved in the regulation of insulin secretion by glucose. It associates with two other G-protein-activated potassium channels to form a heteromultimeric pore-forming complex.

Goat Anti-GIRK2 / KCNJ6 Antibody - References

L-type voltage-dependent calcium channel alpha subunit 1C is a novel candidate gene associated with secondary hyperparathyroidism: an application of haplotype-based analysis for multiple linked single nucleotide polymorphisms. Yokoyama K, et al. Nephron Clin Pract, 2010. PMID 20424473.
Personalized smoking cessation: interactions between nicotine dose, dependence and quit-success genotype score. Rose JE, et al. Mol Med, 2010 Jul-Aug. PMID 20379614.
A KCNJ6 (Kir3.2, GIRK2) gene polymorphism modulates opioid effects on analgesia and addiction but not on pupil size. L□tsch J, et al. Pharmacogenet Genomics, 2010 May. PMID 20220551.
Association between KCNJ6 (GIRK2) gene polymorphisms and postoperative analgesic requirements after major abdominal surgery. Nishizawa D, et al. PLoS One, 2009 Sep 16. PMID 19756153.
Genetic utility of broadly defined bipolar schizoaffective disorder as a diagnostic concept. Hamshere ML, et al. Br J Psychiatry, 2009 Jul. PMID 19567891.