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Goat Anti-Kcnj11 / Kir6.2 Antibody

Peptide-affinity purified goat antibody
Catalog # AF1586a

Specification

Goat Anti-Kcnj11 / Kir6.2 Antibody - Product Information

Application	**WB, IHC, E**
Primary Accession	Q14654
Other Accession	NP_034732, 3767, 16514 (mouse), 83535 (rat)
Reactivity	**Human**
Predicted	**Mouse, Rat, Dog**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**43526**

Goat Anti-Kcnj11 / Kir6.2 Antibody - Additional Information

Gene ID 3767

Other Names
ATP-sensitive inward rectifier potassium channel 11, IKATP, Inward rectifier K(+) channel Kir6.2, Potassium channel, inwardly rectifying subfamily J member 11, KCNJ11

Dilution
WB~~1:1000
IHC~~1:100~500
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-Kcnj11 / Kir6.2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-Kcnj11 / Kir6.2 Antibody - Protein Information

Name KCNJ11

Function

Inward rectifier potassium channel that forms the pore of ATP-sensitive potassium channels (KATP), regulating potassium permeability as a function of cytoplasmic ATP and ADP concentrations in many different cells (PubMed:29286281, PubMed:34815345). 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. Can be blocked by extracellular barium (By similarity). In pancreatic cells, it forms KATP channels with ABCC8/SUR1 (PubMed:29286281, PubMed:34815345). Can form cardiac and smooth muscle-type KATP channels with ABCC9.

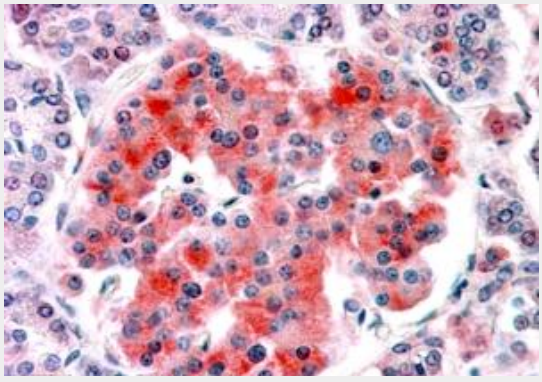
Cellular Location
Membrane; Multi-pass membrane protein.

Goat Anti-Kcnj11 / Kir6.2 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-Kcnj11 / Kir6.2 Antibody - Images



AF1586a (3.8 µg/ml) staining of paraffin embedded Human Pancreas. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

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AF1586a (0.01 µg/ml) staining of Human Muscle lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-Kcnj11 / Kir6.2 Antibody - References

Endoplasmic reticulum accumulation of Kir6.2 without activation of ER stress response in islet cells from adult Sur1 knockout mice. Marhfour I, et al. Cell Tissue Res, 2010 May. PMID 20383647.
Voltage-dependent gating in a voltage sensor-less ion channel. Kurata HT, et al. PLoS Biol, 2010 Feb 23. PMID 20208975.
Sarcolemmal ATP-sensitive K(+) channels control energy expenditure determining body weight. Alekseev AE, et al. Cell Metab, 2010 Jan. PMID 20074528.
Characterization and functional restoration of a potassium channel Kir6.2 pore mutation identified in congenital hyperinsulinism. Bushman JD, et al. J Biol Chem, 2010 Feb 26. PMID 20032456.
Impact of disease-causing SUR1 mutations on the KATP channel subunit interface probed with a rhodamine protection assay. Hosy E, et al. J Biol Chem, 2010 Jan 29. PMID 19933268.