

## KCNJ2 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP6926c

## **Specification**

# KCNJ2 Antibody (C-term) - Product Information

Application FC, IHC-P, WB,E

Primary Accession P63252

Other Accession <u>Q64273</u>, <u>P49656</u>, <u>Q18839</u>, <u>P35561</u>, <u>P52186</u>,

019182

Reactivity Human, Mouse

Predicted Bovine, Chicken, Pig, Rabbit, Rat

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 48288
Antigen Region 401-427

# KCNJ2 Antibody (C-term) - Additional Information

#### **Gene ID 3759**

#### **Other Names**

Inward rectifier potassium channel 2, Cardiac inward rectifier potassium channel, Inward rectifier K(+) channel Kir21, IRK-1, hIRK1, Potassium channel, inwardly rectifying subfamily J member 2, KCNJ2, IRK1

#### **Target/Specificity**

This KCNJ2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 401-427 amino acids from the C-terminal region of human KCNJ2.

### **Dilution**

FC~~1:10~50 IHC-P~~1:50~100 WB~~1:1000

E~~Use at an assay dependent concentration.

#### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### **Storage**

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

#### **Precautions**

KCNJ2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.



## KCNJ2 Antibody (C-term) - Protein Information

## Name KCNJ2

#### Synonyms IRK1

**Function** Inward rectifier potassium channels are characterized by a greater tendency to allow potassium to flow into the cell rather than out of it (PubMed:36149965, PubMed:7590287, PubMed:9490857). 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 (PubMed:7590287, PubMed:7696590). The inward rectification is mainly due to the blockage of outward current by internal magnesium (PubMed:9490857). Can be blocked by extracellular barium or cesium (PubMed:7590287, PubMed:7696590). Probably participates in establishing action potential waveform and excitability of neuronal and muscle tissues (PubMed:7590287, PubMed:7696590, PubMed:7840300).

#### **Cellular Location**

Cell membrane; Multi-pass membrane protein Cell membrane, sarcolemma, T-tubule {ECO:0000250|UniProtKB:Q64273}

#### **Tissue Location**

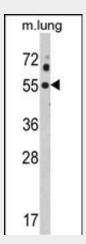
Heart, brain, placenta, lung, skeletal muscle, and kidney. Diffusely distributed throughout the brain

## KCNJ2 Antibody (C-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

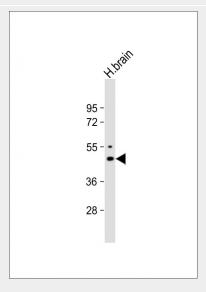
### KCNJ2 Antibody (C-term) - Images



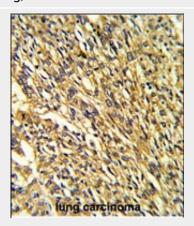
Western blot analysis of KCNJ2 Antibody (C-term) (Cat. #AP6926c) in mouse lung tissue lysates



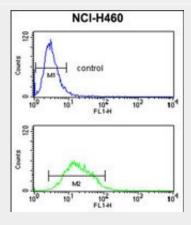
(35ug/lane). KCNJ2 (arrow) was detected using the purified Pab.



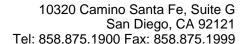
Anti-KCNJ2 Antibody (C-term) at 1:1000 dilution + human brain lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 48 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Formalin-fixed and paraffin-embedded human lung carcinoma reacted with KCNJ2 Antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



KCNJ2 Antibody (C-term) (Cat. #AP6926c) flow cytometry analysis of NCI-H460 cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit





secondary antibodies were used for the analysis.

# KCNJ2 Antibody (C-term) - Background

Potassium channels are present in most mammalian cells, where they participate in a wide range of physiologic responses. This protein is an integral membrane protein and inward-rectifier type potassium channel. This protein, which has a greater tendency to allow potassium to flow into a cell rather than out of a cell, probably participates in establishing action potential waveform and excitability of neuronal and muscle tissues. Mutations in this gene have been associated with Andersen syndrome, which is racterized by periodic paralysis, cardiac arrhythmias, and dysmorphic features.