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KCNJ2 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6926c

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	P63252
Other Accession	Q64273, P49656, O18839, P35561, P52186, O19182
Reactivity	Human, Mouse
Predicted	Bovine, Chicken, Pig, Rabbit, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB21393
Calculated MW	48288
Antigen Region	401-427

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	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 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.

Protein Information

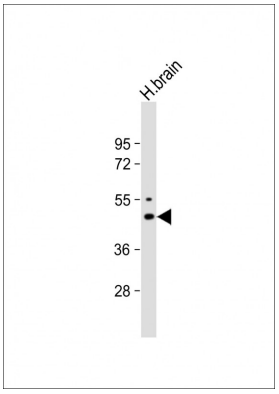
Name	KCNJ2

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

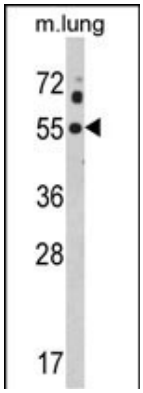
Background

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.

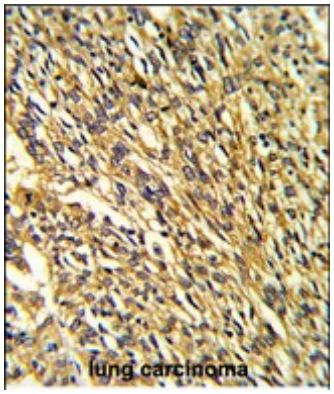
Images



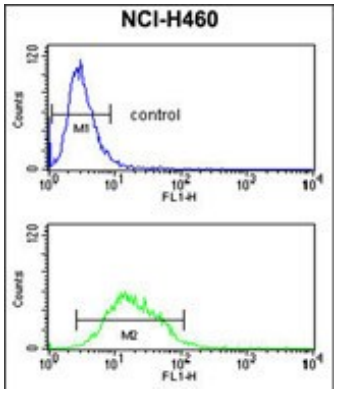
Anti-KCNJ2 Antibody (C-term) at 1:1000 dilution + human brain lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 48 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



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.



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.