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KCNJ11 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9209a

Product Information

Application	WB, FC, E
Primary Accession	Q14654
Other Accession	O02822, Q61743
Reactivity	Human, Mouse
Predicted	Rabbit, Rat, Bovine, Canine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB21238
Calculated MW	43526
Antigen Region	1-30

Additional Information

Gene ID	3767
Other Names	ATP-sensitive inward rectifier potassium channel 11, IKATP, Inward rectifier K(+) channel Kir62, Potassium channel, inwardly rectifying subfamily J member 11, KCNJ11
Target/Specificity	This KCNJ11 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human KCNJ11.
Dilution	WB~~1:1000 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	KCNJ11 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	KCNJ11
Function	Inward rectifier potassium channel that forms the pore of ATP-sensitive

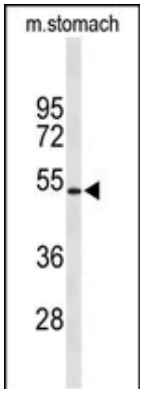
potassium channels (KATP), regulating potassium permeability as a function of cytoplasmic ATP and ADP concentrations in many different cells (PubMed:29286281, PubMed:34815345). Inward rectifier potassium channels are characterized by a greater tendency to allow potassium to flow into the cell rather 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.

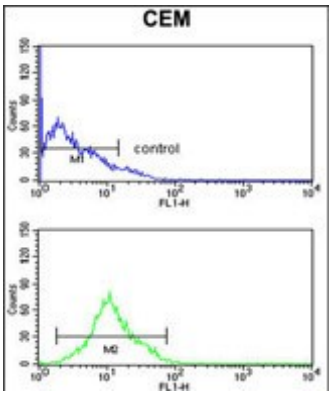
Background

ATP-sensitive potassium (K(ATP)) channels are found in endocrine cells, neurons and both smooth and striated muscle, where they play an important role in controlling insulin secretion and vascular tone, and protect neurons under metabolic stress. Kir6.2 is a member of the inward rectifier potassium channel family, which is characterised by a greater tendency to allow potassium flow into the cell rather than out of it. It associates with the sulphonylurea receptor SUR1/ABCC8 to form a subfamily of K(ATP) channels that, when mutated or misregulated, are associated with forms of hyperinsulinemic hypoglycemia, neonatal diabetes, or pre-disposition to type 2 diabetes mellitus.

Images



Western blot analysis of KCNJ11 Antibody (N-term) (Cat. #AP9209a) in mouse stomach tissue lysates (35ug/lane). KCNJ11 (arrow) was detected using the purified Pab.



KCNJ11 Antibody (N-term) (Cat. #AP9209a) flow cytometry analysis of CEM cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

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