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Rabbit Anti-Kir2.1/AF350 Conjugated antibody

SL17067R-AF350

Product Name	Anti-Kir2.1/AF350
Chinese Name	AF350 标记的钾离子通道 Kir2.1 抗体
Alias	Cardiac inward rectifier potassium channel; HHBIRK 1; HHBIRK1; HHIRK1; HIRK 1; hIRK1; Inward rectifier K; inwardly rectifying subfamily J member 2; IRK 1; IRK2_HUMAN; IRK1; KCNJ2; KIR2.1; LQT7; Potassium channel; Potassium channel inwardly rectifying subfamily J member 2; Potassium inwardly rectifying channel J2; Potassium inwardly rectifying channel subfamily J member 2; SQT 3; SQT3.
Research Area	Cell biology Neurobiology Channel protein
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Mouse,Rat(predicted:Human,Chicken,Dog,Pig,Cow,Horse,Rabbit,Sheep)
Applications	Flow-Cyt=1μg/Test not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight	48kDa
Form	Lyophilized or Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human Kir2.1
Lsotype	IgG
Purification	affinity purified by Protein A
Storage Buffer	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 1M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
Product Detail	**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, 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 characterized by periodic paralysis, cardiac arrhythmias, and dysmorphic features. [provided by RefSeq, Jul 2008]

Function:
Probably participates in establishing action potential waveform and excitability of neuronal and muscle tissues. 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 or cesium.

Subcellular Location:
Membrane.

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

DISEASE:
Defects in KCNJ2 are the cause of long QT syndrome type 7 (LQT7) [MIM:170390]; also called Andersen syndrome or Andersen cardiodysrhythmic periodic paralysis. Long QT syndromes are heart disorders characterized by a prolonged QT interval on the ECG and polymorphic ventricular arrhythmias. They cause syncope and sudden death in response to excercise or emotional stress. LQT7 manifests itself as a clinical triad consisting of potassium-sensitive periodic paralysis, ventricular ectopy and dysmorphic features.
Defects in KCNJ2 are the cause of short QT syndrome type 3 (SQT3) [MIM:609622]. Short QT syndromes are heart disorders characterized by idiopathic persistently and uniformly short QT interval on ECG in the absence of structural heart disease in affected individuals. They cause syncope and sudden death. SQT3 has a unique ECG phenotype characterized by asymmetrical T waves.

Similarity:
Belongs to the inward rectifier-type potassium channel (TC 1.A.2.1) family.

KCNJ2 subfamily.

Database links:

Entrez Gene: 3759 Human

Entrez Gene: 16518 Mouse

Entrez Gene: 29712 Rat

Omim: 600681 Human

SwissProt: P63252 Human

SwissProt: P35561 Mouse

SwissProt: Q64273 Rat

Unigene: 1547 Human

Unigene: 4951 Mouse

Unigene: 44415 Rat

Important Note:
This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.