Product Name: KIR2.1 Rabbit Polyclonal Antibody
Catalog #: APRab13026

Summary

Production Name	KIR2.1 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	WB,IHC,ELISA
Reactivity	Human,Rat

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	KCNJ2
Alternative Names	KCNJ2; IRK1; Inward rectifier potassium channel 2; Cardiac inward rectifier potassium channel; Inward rectifier K(+) channel Kir2.1; IRK-1; hIRK1; Potassium channel; inwardly rectifying subfamily J member 2
Gene ID	3759.0
SwissProt ID	P63252.The antiserum was produced against synthesized peptide derived from human KCNJ2. AA range:81-130

Application

Dilution Ratio	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:10000..
Molecular Weight	48kD

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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],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.,disease: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.,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.,similarity:Belongs to the inward rectifier-type potassium channel family.,subunit:Homomultimeric and heteromultimeric association with Kir2.3, resulting in an enhanced G-protein-induced current. Association, via its PDZ-recognition domain, with LIN7A, LIN7B, LIN7C, DLG1, CASK and APBA1 plays a key role in its localization and trafficking.,tissue specificity:Heart, brain, placenta, lung, skeletal muscle, and kidney. Diffusely distributed throughout the brain.,

Research Area

Image Data

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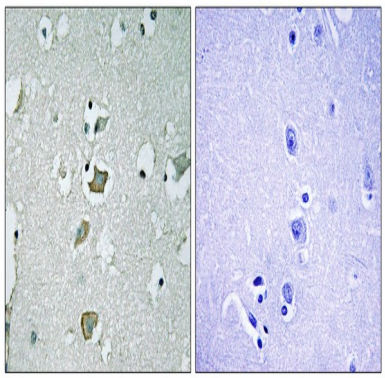
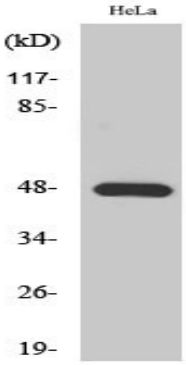


Immunohistochemistry analysis of paraffin-embedded human brain tissue, using KCNJ2 Antibody. The picture on the right is blocked with the synthesized peptide.



Western Blot analysis of various cells using KIR2.1 Polyclonal Antibody diluted at 1： 500

Note

For research use only.