



# KIR2.1 Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-16441
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Rat
<b>Applications</b>	WB;IHC;IF;ELISA
<b>Gene Name</b>	KCNJ2
<b>Protein Name</b>	Inward rectifier potassium channel 2
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human KCNJ2. AA range:81-130
<b>Specificity</b>	KIR2.1 Polyclonal Antibody detects endogenous levels of KIR2.1 protein.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/10000.. IF 1:50-200
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	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
<b>Observed Band</b>	48kD
<b>Cell Pathway</b>	Membrane; Multi-pass membrane protein. Membrane; Lipid-anchor .
<b>Tissue Specificity</b>	Heart, brain, placenta, lung, skeletal muscle, and kidney. Diffusely distributed throughout the brain.
<b>Function</b>	disease:Defects in KCNJ2 are the cause of long QT syndrome type 7 (LQT7) [MIM:170390]; also called Andersen syndrome or Andersen cardiomyopathic 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 exercise 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 wave



## 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],

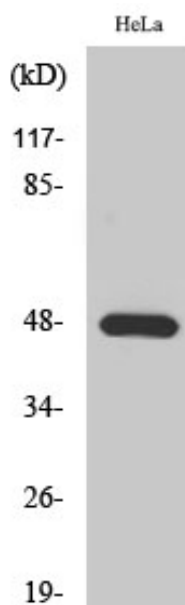
## matters needing attention

Avoid repeated freezing and thawing!

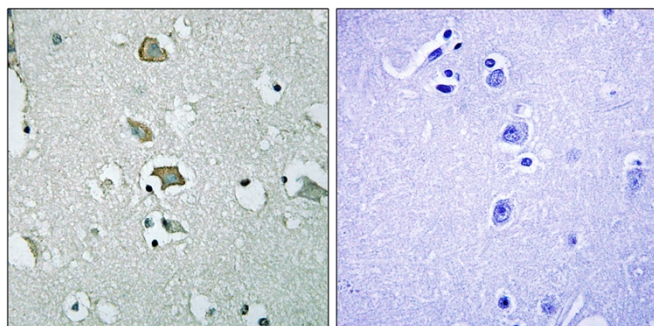
## Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

## Products Images



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



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