#### For Research Use Only

# Kir2.1 Polyclonal antibody

Catalog Number: 19965-1-AP 11 Publications



**Basic Information** 

Catalog Number: 19965-1-AP

GenBank Accession Number:

**Purification Method:** 

Size:

GeneID (NCBI):

Antigen affinity purification

150ul, Concentration: 700 ug/ml by

NM 000891

Recommended Dilutions:

Nanodrop and 327 ug/ml by Bradford  $\,$  UNIPROT ID: method using BSA as the standard;

P63252

WB 1:200-1:1000

Source:

Isotype:

Full Name:

Rabbit

potassium inwardly-rectifying channel, subfamily J, member 2

Calculated MW:

48 kDa

Observed MW:

50 kDa, 60 kDa

**Applications** 

**Tested Applications:** 

WB, ELISA

Cited Applications: WB, IHC

Species Specificity:

human, mouse, rat

Cited Species:

human, mouse, rat, rabbit

Positive Controls:

WB: A549 cells,

### **Background Information**

KCNJ2, also named as HHBIRK1, HHIRK1, IRK1, KIR2.1, LQT7 and SQT3, belongs to the inward rectifier-type potassium  $channel\ family.\ KCNJ2\ probably\ participates\ in\ establishing\ action\ potential\ waveform\ and\ excitability\ of\ neuronal\ probably\ participates\ in\ establishing\ action\ potential\ waveform\ and\ excitability\ of\ neuronal\ probably\ participates\ in\ establishing\ action\ potential\ waveform\ and\ excitability\ of\ neuronal\ probably\ participates\ in\ establishing\ action\ potential\ waveform\ and\ excitability\ of\ neuronal\ probably\ participates\ in\ establishing\ action\ potential\ waveform\ and\ excitability\ of\ neuronal\ probably\ participates\ participates\$ 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. KCNJ2 can be blocked by extracellular barium or cesium. Defects in KCNJ2 are the cause of long QT syndrome type 7 (LQT7). Defects in KCNJ2 are the cause of short QT syndrome type 3 (SQT3). The antibody recognizes the C-term of KCNJ2.

#### **Notable Publications**

Author	Pubmed ID	Journal	Application
Juanjuan Du	32954646	J Cell Mol Med	WB
Zhan Li	28546098	J Mol Cell Cardiol	WB
Weiwei Yu	35729093	Nat Commun	WB

Storage

Storage:

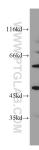
Store at -20°C. Stable for one year after shipment.

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

## Selected Validation Data



A549 cells were subjected to SDS PAGE followed by western blot with 19965-1-AP (Kir2.1 antibody) at dilution of 1:200 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffinembedded human brain tissue slide using 19965-1-AP (Kir2.1 antibody at dilution of 1:50.