



KIR3.1 Polyclonal Antibody

Catalog No	YP-Ab-16443
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IHC
Gene Name	KCNJ3
Protein Name	G protein-activated inward rectifier potassium channel 1
Immunogen	The antiserum was produced against synthesized peptide derived from human GIRK1/KIR3.1/KCNJ3. AA range:151-200
Specificity	KIR3.1 Polyclonal Antibody detects endogenous levels of KIR3.1 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-2000;IHC-p 1:50-300
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	KCNJ3; GIRK1; G protein-activated inward rectifier potassium channel 1; GIRK-1; Inward rectifier K(+) channel Kir3.1; Potassium channel; inwardly rectifying subfamily J member 3
Observed Band	56kD
Cell Pathway	Membrane; Multi-pass membrane protein.
Tissue Specificity	Brain,Epithelium,
Function	function:This potassium channel is controlled by G proteins. 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. This receptor plays a crucial role in regulating the heartbeat.,similarity:Belongs to the inward rectifier-type potassium channel family.,subunit:Associates with GIRK2, GIRK3 or GIRK4 to form a G-protein activated heteromultimer pore-forming unit. The resulting inward current is much larger.,



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, is controlled by G-proteins and plays an important role in regulating heartbeat. It associates with three other G-protein-activated potassium channels to form a heteromultimeric pore-forming complex that also couples to neurotransmitter receptors in the brain and whereby channel activation can inhibit action potential firing by hyperpolarizing the plasma membrane. These multimeric G-protein-gated inwardly-rectifying potassium (GIRK) channels may play a role in the pathophysiology of epilepsy, addiction, Down's syndrome, at

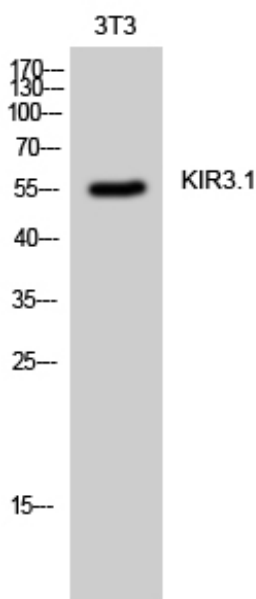
matters needing attention

Avoid repeated freezing and thawing!

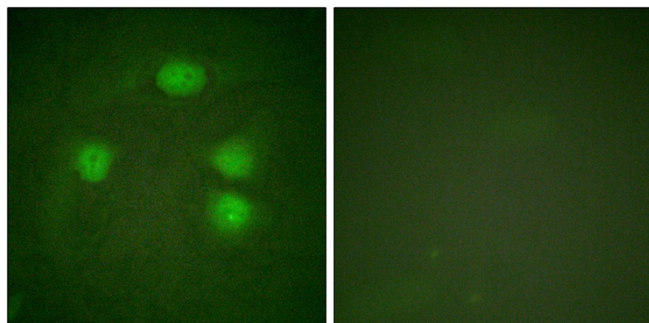
Usage suggestions

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

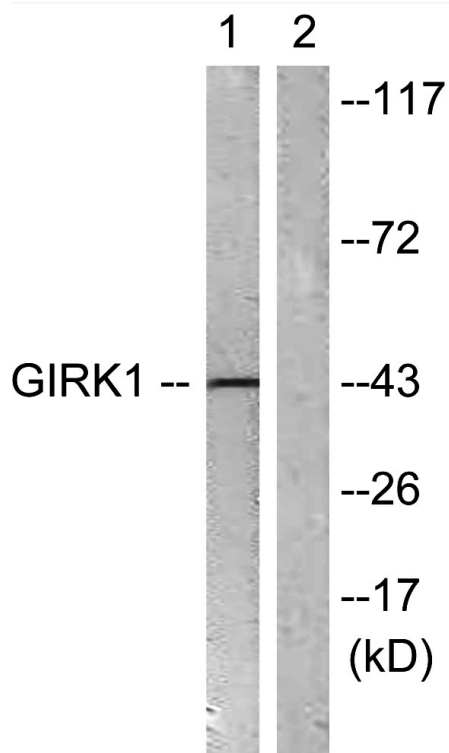
Products Images



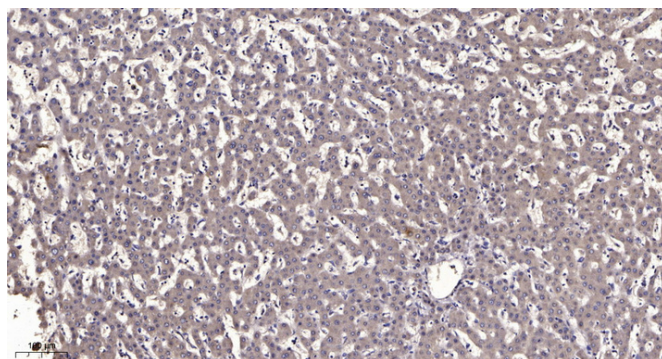
Western Blot analysis of 3T3 cells using KIR3.1 Polyclonal Antibody



Immunofluorescence analysis of HeLa cells, using GIRK1/KIR3.1/KCNJ3 Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from NIH/3T3 cells, using GIRK1/KIR3.1/KCNJ3 Antibody. The lane on the right is blocked with the synthesized peptide.



Immunohistochemical analysis of paraffin-embedded human liver cancer. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA, pH9.0 was used for antigen retrieval. 3, Secondary antibody was diluted at 1:200(room temperature, 45min).