
Summary

Production Name	GIRK-1 Rabbit Monoclonal Antibody
Description	Recombinant Rabbit Monoclonal antibody
Host	Rabbit
Application	WB,FC
Reactivity	Human, Mouse, Rat

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Monoclonal Antibody
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.
Purification	Affinity Purified

Immunogen

Gene Name	KCNJ3 G protein-activated inward rectifier potassium channel 1; GIRK-1; Inward rectifier K(+)
Alternative Names	channel Kir3.1; Potassium channel, inwardly rectifying subfamily J member 3; KCNJ3; GIRK1
Gene ID	3760.0
SwissProt ID	P48549

Application

Dilution Ratio	WB: 1/500-1/1000 FC: 1/50-1/100
Molecular Weight	Calculated MW:57 kDa;Observed MW: 57 kDa

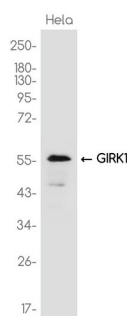
Background

G protein-coupled inwardly rectifying potassium channels (KIR3.1 through KIR3.4) are coupled to numerous neurotransmitter receptors in the brain and are abundantly expressed in the olfactory bulb, hippocampus, neocortex, dentate gyrus, cerebellar cortex and thalamus regions of the brain. Also known as GIRK, KIR3 potassium channels localize to the soma and dendrites as well as axons of neurons. Liberated G $\beta\gamma$ subunits from G protein heterotrimers bind to and regulate KIR3 channel activity. G β 3- and G β 4-containing G $\beta\gamma$ dimers bind directly to cytoplasmic domains of KIR3 proteins and increase the K $^{+}$ current while G β 5-containing G $\beta\gamma$ dimers inhibit KIR3 K $^{+}$ current. KIR3 activity is also inhibited by tyrosine phosphorylation. Brain-derived neurotrophic factor activates receptor tyrosine kinase B, which then phosphorylates KIR3 tyrosine residues, effectively inactivating the KIR3 channels.

Research Area

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Image Data



Western blot analysis of GIRK-1 in HeLa lysates using GIRK-1 antibody.

Note

For research use only.