

Product Name: GIRK-1 Rabbit Monoclonal Antibody**Catalog #: AMRe03997**

For research use only.

Summary

Description	Recombinant rabbit monoclonal antibody
Host	Rabbit
Application	WB,FC
Reactivity	Human, Mouse, Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Monoclonal
Form	Liquid
Concentration	
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% protective protein.
Purification	Affinity Purification

Application

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

Antigen Information

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

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 Gby subunits from G protein heterotrimers bind to and regulate KIR3 channel activity. Gb3- and Gb4-containing Gby dimers bind directly to cytoplasmic domains of KIR3 proteins and increase the K⁺ current while Gb5-containing Gby 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

Image Data

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

