

# **Anti-GIRK-1 Rabbit Monoclonal Antibody**

### Introduction

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

## Product parameters

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
Gene Name	KCNJ3
SwissProt ID	P48549
Host	Rabbit
Reactivity	Human, Mouse, Rat
Molecular Weight	Calculated MW: 57 kDa; Observed MW: 57 kDa
Conjugation	Unconjugated
Ex	-
Em	-
Modification	Unmodified
Clonality	IgG
Isotype	Monoclonal Antibody
Clonality No.	AP-13G7G8
Form	Liquid
Concentration	See label
Carrier	Carrier Not Free
Immunogen	Peptide
Purification	Affinity Purified

Buffer System	Liquid in 50mM Tris-Glycine (pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.
Application	WB, FC
Dilution Ratio	WB: 1/500-1/1000 FC: 1/50-1/100
Research Field	-
Product Categories	Primary antibody
Shipping	Blue ice
Storage	-20°C APEXBO
Expiration Date	12 months
Note	Please avoid freeze-thaw cycles.

## Protocol

Configure the product according to the application range and recommended dilution ratio.

\*Note: The primary antibody dilution buffer options: WB - Primary Antibody Dilution Buffer (Cat. #: K1200, Not for HRP/AP conjugated antibodies), Immunostaining - Immunol Staining Primary Antibody Dilution Solution (Cat. #: K4655).

### Note

1. This product is for scientific research use only.















