

Datasheet for ABIN7043490

anti-KCNJ9 antibody (Intracellular)



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1 Image

Overview

Quantity:	50 µL
Target:	KCNJ9
Binding Specificity:	AA 344-361, Intracellular
Reactivity:	Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This KCNJ9 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunofluorescence (IF), Immunochromatography (IC)

Product Details

Purpose:	A Rabbit Polyclonal Antibody to GIRK3 (Kir3.3) Channel
Immunogen:	Immunogen: Synthetic peptide Immunogen Sequence: (C)RLDAHLYWSIPSRLEKDV, corresponding to residues 344-361 of rat KCNJ9
Isotype:	IgG
Specificity:	Intracellular, C-terminus
Cross-Reactivity:	Human, Mouse, Rat
Predicted Reactivity:	Mouse,human - identical
Characteristics:	Anti-GIRK3 (Kir3.3) Antibody (ABIN7043490, ABIN7044946 and ABIN7044947) is a highly

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specific antibody directed against an epitope of the rat protein. The antibody can be used in western blot, immunohistochemistry, and immunocytochemistry applications. It has been designed to recognize Kir3.3 from human, rat, and mouse samples.

Purification: Affinity purified on immobilized antigen.

Grade: KO Validated

Target Details

Target: KCNJ9

Alternative Name: KCNJ9 ([KCNJ9 Products](#))

Background: G protein-activated inward rectifier potassium channel 3, KCNJ9,Kir3.3 (or G-protein regulated Inward-Rectifier K⁺ channel, GIRK3) is a member of the family of inward rectifying K⁺ channels. The family includes 15 members that are structurally and functionally different from the voltage-dependent K⁺ channels. The family's topology consists of two transmembrane domains that flank a single and highly conserved pore region with intracellular N- and C-termini. As is the case for the voltage-dependent K⁺ channels the functional unit for the Kir channels is composed of four subunit that can assembly as either homo or heterotetramers. Kir channels are characterized by a K⁺ efflux that is limited by depolarizing membrane potentials thus making them essential for controlling resting membrane potential and K⁺ homeostasis. Kir3.3 is a member of the Kir3.x subfamily that includes four members (Kir3.1- Kir3.4). The Kir3 family is characterized by the fact that the channels can be activated by neurotransmitters and other factors acting via the activation of G-protein coupled receptors. Binding of the corresponding ligand to the G-protein receptor induces the dissociation of Ga-GTP from the Gbg dimer. The latter directly binds to Kir3 and activates the channel.^{1,2} Kir3.3 is mainly expressed in the brain, were it co-assembles with Kir3.1 or Kir3.2. The functional impact of Kir3.3 is less well understood than the other Kir3 channels. However, heteromers composed of Kir3.2 and Kir3.3 were found to be primarily responsible for the opioid-induced current and hyperpolarization observed in mouse locus ceruleus (LC) neurons.³

Alternative names: GIRK3 (Kir3.3), G protein-activated inward rectifier potassium channel 3, KCNJ9

Gene ID: 116560

NCBI Accession: [NM_004983](#)

UniProt: [Q63511](#)

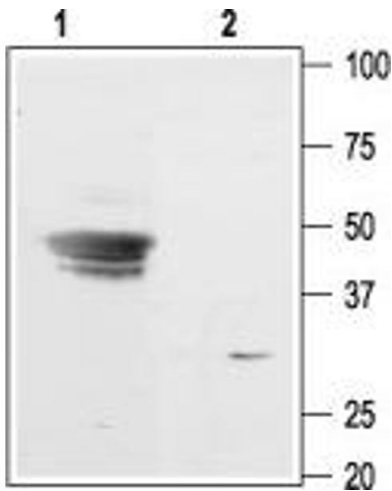
Application Details

Application Notes:	Antigen preadsorption control: 1 µg peptide per 1 µg antibody Application Dilutions Immunohistochemistry paraffin embedded sections ihc: 1:400 Application Dilutions Western blot wb: 1:200
Comment:	Negative Control: (ABIN7236414) Blocking Peptide: (ABIN7236414)
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	0.2 mL double distilled water (DDW).
Concentration:	1 mg/mL
Buffer:	PBS pH 7.4
Storage:	4 °C,-20 °C
Storage Comment:	Storage before reconstitution: The antibody ships as a lyophilized powder at room temperature. Upon arrival, it should be stored at -20°C. Storage after reconstitution: The reconstituted solution can be stored at 4°C for up to 1 week. For longer periods, small aliquots should be stored at -20°C. Avoid multiple freezing and thawing. Centrifuge all antibody preparations before use (10000 x g 5 min).

Images



Western Blotting

Image 1. Western blot analysis of rat brain membranes: - 1. Anti-GIRK3 (Kir3.3) Antibody (ABIN7043490, ABIN7044946 and ABIN7044947), (1:200).2. Anti-GIRK3 (Kir3.3) Antibody, preincubated with GIRK3/Kir3.3 Blocking Peptide (#BLP-PC038).