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Product datasheet for TA328944

Kcnj9 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	WB: 1:200-1:2000; IHC: 1:100-1:3000
Reactivity:	Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Peptide (C)RLDAHLYWSIPSRLDEKV, corresponding to residues 344-361 of rat Kir3.3 .?Â ?Â Intracellular, C-terminus.
Formulation:	Lyophilized. Concentration before lyophilization ~0.8mg/ml (lot dependent, please refer to CoA along with shipment for actual concentration). Buffer before lyophilization: Phosphate buffered saline (PBS), pH 7.4, 1% BSA, 0.025% NaN3.
Reconstitution Method:	Add 50 ul double distilled water (DDW) to the lyophilized powder.
Purification:	Affinity purified on immobilized antigen.
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	potassium voltage-gated channel subfamily J member 9
Database Link:	NP_446286 Entrez Gene 116560 Rat Q63511

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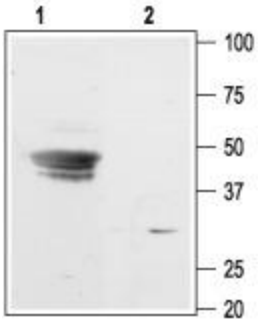
Background: Kir3.3 (or G-protein regulated Inward-Rectifier K+ channel, GIRK3) is a member of the family of inward rectifying K+ channels. The family includes 15 members that are structurally and functionally different from the voltage-dependent K+ channels. The family's topology consists of two transmembrane 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. 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.

Synonyms: GIRK3; Kir3.3

Product images:



Western blot analysis of rat brain membranes: 1. Anti-Kir3.3 (GIRK3) antibody, (1:200). 2. Anti-Kir3.3 (GIRK3) antibody, preincubated with the control peptide antigen.