

Product datasheet for **TA328939**

Kcnj5 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	WB: 1:200-1:2000; IHC: 1:100-1:3000
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Peptide RNAMNQDMEIGVT(C), corresponding to amino acid residues 6-18 of rat Kir3.4. Intracellular, N-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, 0.05% NaN ₃ .
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 5
Database Link:	NP_058993 Entrez Gene 3762 Human Entrez Gene 16521 Mouse Entrez Gene 29713 Rat P48548



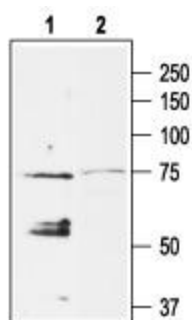
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Background:

Kir3.4 is a member of the G-protein regulated inward-rectifier K⁺ (GIRK) channel subfamily which is part of an inward-rectifier K⁺ channel superfamily. The GIRK subfamily comprises four members in mammals (Kir3.1- Kir3.4) that present the common topology of the inward-rectifier superfamily: two transmembrane domains flanking a highly conserved pore region with the N and C-terminus located intracellularly. Kir3.4 and the other Kir3 family subunits can be activated by neurotransmitters and other factors via the activation of G-protein coupled receptors. Binding of the corresponding ligand to the G-protein receptor induces the dissociation of G α -GTP from the G $\alpha\beta\gamma$ dimer. The latter directly binds to Kir3 and activates the channel. Kir3.4 expression is largely confined to the heart, where it co-assembles with Kir3.1 to form the prototypical muscarinic-gated K⁺ channel KACH. Indeed, knockout mice for Kir3.4 showed impaired heart rate following vagal nerve stimulation. A peptide toxin originating from the *Apis mellifera* bee venom, Tertiapin was shown to be a potent blocker of Kir3.4 containing channels (8.6 nM for the Kir3.1/3.4 combination).⁴

Synonyms:

CIR; GIRK4; KATP-1; KATP1; KIR3.4

Product images:


Western blot analysis of rat heart membranes: 1. Anti-Kir3.4 (GIRK4) antibody, (1:200). 2. Anti-Kir3.4 (GIRK4) antibody, preincubated with the control antigen.