

Product datasheet for **TA328942**

Kcnj10 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 (C)KLEE SLREQ AEKEG SALSV R, corresponding to amino acid residues 356-375 of rat Kir4.1. 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, 0.05% 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 10
Database Link:	NP_113790 Entrez Gene 3766 Human Entrez Gene 16513 Mouse Entrez Gene 29718 Rat P49655



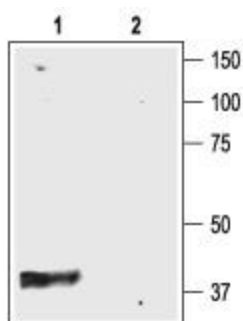
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Background:

Kir4.1 is a member of the inward rectifying K⁺ channel family. 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 heteromers. 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. Kir4.1 is a member of the Kir4 subfamily that includes one other member: Kir4.2. Kir4.1 can co-assemble with Kir4.2 but also with other Kir channels such as Kir2.1 and Kir5.1. The Kir4 subfamily has been classified as weak rectifiers with intermediate conductance. Kir4.1 is mainly expressed in brain, specifically in glia cells, but also in retina, ear and kidney. It has been proposed that Kir4.1 has an essential role in glial K⁺ buffering, a process that re-uptakes the K⁺ released during neuronal activity into the intracellular interstitial space. Loss of Kir4.1 causes retinal defects and loss of endochoclear potential.

Synonyms:

BIRK-10; KCNJ13-PEN; Kir1.2; Kir4.1; SESAME

Product images:

Western blot analysis of rat brain membranes: 1. Anti-Kir4.1 antibody, (1:400). 2. Anti-Kir4.1 antibody, preincubated with the control peptide antigen.