OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for TA328938

Kir2.1 (KCNJ2) 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)NGVPESTSTDTPPDIDLHN, corresponding to amino acid residues 392-410 of human Kir2.1. Intracellular, C-terminal part.
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% 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 2
Database Link:	NP_000882 Entrez Gene 16518 MouseEntrez Gene 29712 RatEntrez Gene 3759 Human P63252

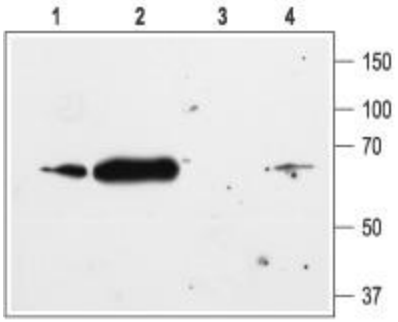
View online »

Background: Kir2.1 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.1 The familyâ??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. Kir2.1 is a member of the Kir2.x subfamily that includes four members (Kir2.1- Kir2.4) that are characterized by strong inward rectification and high constitutive activity.Kir2.1 is expressed in a variety of tissues including heart, brain, vascular smooth muscle cells and skeletal muscles.In heart, Kir2.1 is a molecular component of the IK1 current that is responsible for setting the resting membrane potential, preventing membrane hyperpolarization due to Na+ pump activity, influencing propagation velocity, altering the electrical space constant, and promoting late phase repolarization. In fact, mutations in Kir2.1 channels have been linked to a form of long QT syndrome (LQT7) known as Andersen's syndrome that is characterized by cardiac arrhythmias, periodic paralysis, and dysmorphic features.

Synonyms: ATFB9; HHBIRK1; HHIRK1; IRK1; KIR2.1; LQT7; SQT3

Protein Families: Druggable Genome, Ion Channels: Potassium, Transmembrane

Product images:



Western blot analysis of rat heart (1 and 3) and rat brain (2 and 4) membranes: 1, 2. Anti-Kir2.1 antibody, (1:200). 3, 4. Anti-Kir2.1, antibody, preincubated with the control peptide antigen.