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Product datasheet for TA328978

Kcnj13 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	FC, IHC, WB
Recommended Dilution:	WB: 1:200-1:2000; IHC: 1:100-1:3,000; FC: 1:50-1:600
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Peptide (C)EMNGDLEIDHDVPPE, corresponding to amino acid residues 80-94 of rat Kir7.1 . Extracellular loop.
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 13
Database Link:	NP_446060 Entrez Gene 3769 HumanEntrez Gene 100040591 MouseEntrez Gene 94341 Rat O70617

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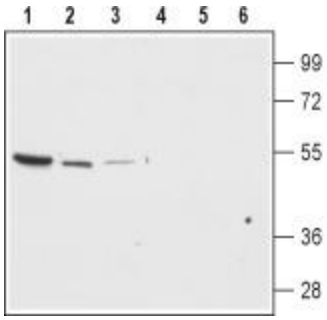
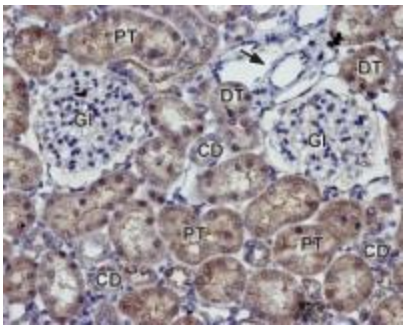
Background: Kir7.1 (KCNJ13) is a member of the family of inward rectifying K+ channels. The family includes 15 members that are structurally and functionally different from the voltage-dependent K+ channels.The familyâ??s protein topology consists of two transmembrane domains that flank a single and 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 subunits 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. Kir7.1, an inwardly rectifying K+ channel with unusual permeation properties is localized in epithelial cells of the thyroid, small intestine, kidney tubules, choroid plexus and in retinal pigment epithelium (RPE), where it forms a major component of the apical membrane K+ conductance.A mutation in the gene encoding the channel was found to cause snowflake vitreoretinal degeneration (SVD) which is a developmental and progressive hereditary eye disorder that affects multiple tissues within the eye.

Synonyms: Kir1.4; Kir7.1; MGC33328; OTTHUMP00000203613; SVD

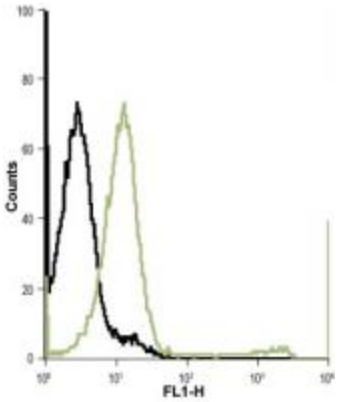
Product images:



Western blot analysis of rat brain membrane (lanes 1 and 4), mouse brain (lanes 2 and 5) and mouse kidney lysates (lanes 3 and 6): 1-3. Anti-Kir7.1 (extracellular) antibody, (1:200). 4-6. Anti-Kir7.1 (extracellular) antibody, preincubated with the control peptide antigen.



Expression of Kir7.1 in rat kidney. Immunohistochemical staining of paraffin embedded section of rat kidney using Anti-Kir7.1 (extracellular) antibody, (1:100). Staining is present in both distal (DT) and proximal (PT) tubules and in the collecting ducts (CD) in the renal cortex. Note that staining is absent both in glomeruli (GI) and blood vessels (arrow). Hematoxilin is used as the counterstain.



Indirect flow cytometry analysis of live intact Jurkat (human T cell leukemia) cell line: black line: Cells + Goat-anti-Rabbit-FITC. Green line: Cells + Anti-Kir7.1 (extracellular) antibody, (1:20) + Goat-anti-Rabbit-FITC.