

Rabbit Kv2.1/KCNB1 Polyclonal Antibody | anti-Kv2.1/KCNB1 antibody

Kv2.1/KCNB1 Polyclonal Antibody

CATALOG # AAA296670	HOST Rabbit	REACTIVITY Human, Mouse, Rat	APPLICATIONS Western Blot
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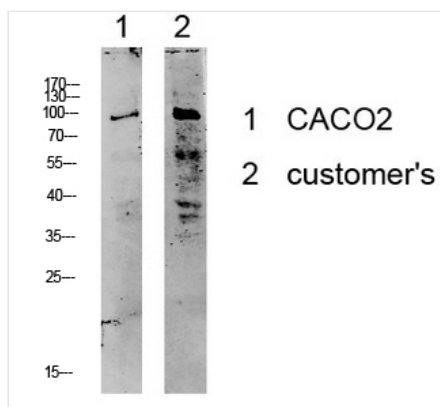
PRODUCT SYNONYMS

Kv2.1/KCNB1; Polyclonal Antibody; Kv2.1/KCNB1 Polyclonal Antibody; Potassium voltage-gated channel subfamily B member 1 (Delayed rectifier potassium channel 1)(DRK1)(h-DRK1)(Voltage-gated potassium channel subunit Kv2.1); anti-Kv2.1/KCNB1 antibody

PRODUCT SPECIFICATIONS

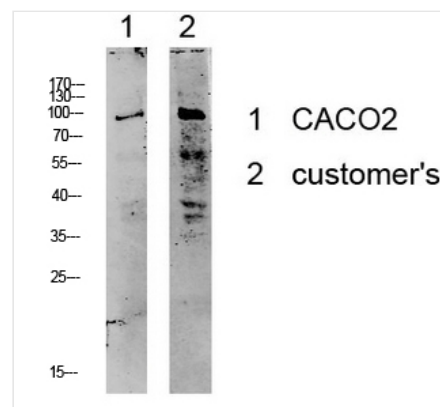
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Applicable Applications for anti-Kv2.1/KCNB1 antibody	WB (Western Blot)
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 2 weeks. For long term storage store at -20 degree C in small aliquots to prevent freeze-thaw cycles.

IMAGES



WB (Western Blot)

Dilution: WB 1:500-2000, ELISA 1:10000-20000



WB (Western Blot)

Dilution: WB 1:500-2000, ELISA 1:10000-20000

ADDITIONAL INFORMATION

Related Product Information for anti-Kv2.1/KCNB1 antibody	Voltage-gated potassium channel that mediates transmembrane potassium transport in excitable membranes, primarily in the brain, but also in the pancreas and cardiovascular system. Contributes to the regulation of the action potential (AP) repolarization, duration and frequency of repetitive AP firing in neurons, muscle cells and endocrine cells and plays a role in homeostatic attenuation of electrical excitability throughout the brain (PubMed:1283219, PubMed:10484328, PubMed:12560340, PubMed:19074135, PubMed:19717558, PubMed:24901643). Can form functional homotetrameric and heterotetrameric channels that contain variable proportions of KCNB2; channel properties depend on the type of alpha subunits that are part of the channel (By similarity). Can also form functional heterotetrameric channels with other alpha subunits that are non-conducting when expressed alone, such as KCNF1, KCNG1, KCNG3, KCNG4, KCNH1, KCNH2, KCNS1, KCNS2, KCNS3 and KCNV1, creating a functionally diverse range of channel complexes (PubMed:11852086, PubMed:12060745, PubMed:19074135, PubMed:19717558, PubMed:24901643). Heterotetrameric channel activity formed with KCNS3 show increased current amplitude with the threshold for action potential activation shifted towards more negative values in hypoxic-treated pulmonary artery smooth muscle cells (By similarity). Channel properties are also modulated by cytoplasmic ancillary beta subunits such as AMIGO1, KCNE1, KCNE2 and KCNE3, slowing activation and inactivation rate of the delayed rectifier potassium channels (By similarity). In vivo, membranes probably contain a mixture of heteromeric potassium channel complexes, making it difficult to assign currents observed in intact tissues to any particular potassium channel family member. Major contributor to the slowly inactivating delayed-rectifier voltage-gated potassium current in neurons of the central nervous system, sympathetic ganglion neurons, neuroendocrine cells, pancreatic beta cells, cardiomyocytes and smooth muscle cells. Mediates the major part of the somatodendritic delayed-rectifier potassium current in hippocampal and cortical pyramidal neurons and sympathetic superior cervical ganglion (CGC) neurons that acts to slow down periods of firing, especially during high frequency stimulation. Plays a role in the induction of long-term potentiation (LTP) of neuron excitability in the CA3 layer of the hippocampus (By similarity). Contributes to the regulation of glucose-induced action potential amplitude and duration in pancreatic beta cells, hence limiting calcium influx and insulin secretion (PubMed:23161216). Plays a role in the regulation of resting membrane potential and contraction in hypoxia-treated pulmonary artery smooth muscle cells. May contribute to the regulation of the duration of both the action potential of cardiomyocytes and the heart ventricular repolarization QT interval. Contributes to the pronounced pro-apoptotic potassium current surge during neuronal apoptotic cell death in response to oxidative injury. May confer neuroprotection in response to hypoxia/ischemic insults by suppressing pyramidal neurons hyperexcitability in hippocampal and cortical regions (By similarity). Promotes trafficking of KCNG3, KCNH1 and KCNH2 to the cell surface membrane, presumably by forming heterotetrameric channels with these subunits (PubMed:12060745). Plays a role in the calcium-dependent recruitment and release of fusion-competent vesicles from the soma of neurons, neuroendocrine and glucose-induced pancreatic beta cells by binding key components of the fusion machinery in a pore-independent manner (By similarity).
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NCBI AND UNIPROT INFORMATION

NCBI GI #	4826784
NCBI GeneID	3745
NCBI Accession #	NP_004966.1
NCBI GenBank Nucleotide #	NM_004975.2
UniProt Accession #	Q14721; Q14193
Molecular Weight	95,878 Da
NCBI Official Full Name	potassium voltage-gated channel subfamily B member 1
NCBI Official Synonym Full Names	potassium voltage-gated channel, Shab-related subfamily, member 1
NCBI Official Symbol	KCNB1
NCBI Official Synonym Symbols	DRK1; KV2.1; h-DRK1
NCBI Protein Information	potassium voltage-gated channel subfamily B member 1; h-DRK1 K(+) channel; potassium channel protein DRK1; delayed rectifier potassium channel 1; delayed rectifier potassium channel Kv2.1; voltage-gated potassium channel subunit Kv2.1
UniProt Protein Name	Potassium voltage-gated channel subfamily B member 1
UniProt Gene Name	KCNB1

UniProt Synonym Gene Names	DRK1; h-DRK1
UniProt Entry Name	KCNB1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/kv21-kcnb1-antibody-western-blot-elisa/296670>