

Kv2.1 (phospho Ser567) rabbit pAb**Cat#: orb768867 (Manual)**

For research use only. Not intended for diagnostic use.

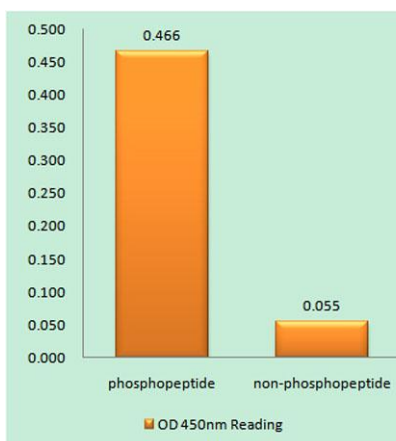
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|---------------------------------|--|
| Product Name | Kv2.1 (phospho Ser567) rabbit pAb |
| Host species | Rabbit |
| Applications | IHC;IF;ELISA |
| Species Cross-Reactivity | Human;Mouse;Rat |
| Recommended dilutions | Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/10000. Not yet tested in other applications. |
| Immunogen | The antiserum was produced against synthesized peptide derived from human Kv2.1/KCNB1 around the phosphorylation site of Ser567. AA range:533-582 |
| Specificity | Phospho-Kv2.1 (S567) Polyclonal Antibody detects endogenous levels of Kv2.1 protein only when phosphorylated at S567. |
| Formulation | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.. |
| Storage | Store at -20°C. Avoid repeated freeze-thaw cycles. |
| Protein Name | Potassium voltage-gated channel subfamily B member 1 |
| Gene Name | KCNB1 |
| Cellular localization | Cell membrane . Perikaryon . Cell projection, axon . Cell projection, dendrite . Membrane; Multi-pass membrane protein. Cell junction, synapse, postsynaptic cell membrane . Cell junction, synapse . Cell junction, synapse, synaptosome . Lateral cell membrane . Cell membrane, sarcolemma . Localizes to high-density somatodendritic clusters and non-clustered sites on the surface of neocortical and hippocampal pyramidal neurons in a cortical actin cytoskeleton-dependent manner (PubMed:24477962). Localizes also to high-density clusters in the axon initial segment (AIS), at ankyrin-G-deficient sites, on the surface of neocortical and hippocampal pyramidal neurons (PubMed:24477962). KCNB1-containing AIS clusters localize either in close |

apposition to smooth endoplasmic reticulum cisternal organelle

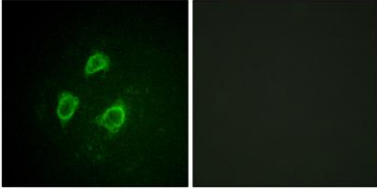
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|--------------------------------|---|
| Purification | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen. |
| Clonality | Polyclonal |
| Concentration | 1 mg/ml |
| Observed band | |
| Human Gene ID | 3745 |
| Human Swiss-Prot Number | Q14721 |
| Alternative Names | KCNB1; Potassium voltage-gated channel subfamily B member 1; Delayed rectifier potassium channel 1; DRK1; h-DRK1; Voltage-gated potassium channel subunit Kv2.1 |

Background

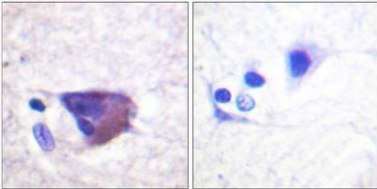
Voltage-gated potassium (Kv) channels represent the most complex class of voltage-gated ion channels from both functional and structural standpoints. Their diverse functions include regulating neurotransmitter release, heart rate, insulin secretion, neuronal excitability, epithelial electrolyte transport, smooth muscle contraction, and cell volume. Four sequence-related potassium channel genes - shaker, shaw, shab, and shal - have been identified in *Drosophila*, and each has been shown to have human homolog(s). This gene encodes a member of the potassium channel, voltage-gated, shab-related subfamily. This member is a delayed rectifier potassium channel and its activity is modulated by some other family members. [provided by RefSeq, Jul 2008],



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using Kv2.1/KCNB1 (Phospho-Ser567) Antibody



Immunofluorescence analysis of HepG2 cells, using Kv2.1/KCNB1 (Phospho-Ser567) Antibody. The picture on the right is blocked with the phospho peptide.



Immunohistochemistry analysis of paraffin-embedded human brain, using Kv2.1/KCNB1 (Phospho-Ser567) Antibody. The picture on the right is blocked with the phospho peptide.