

Anti-KCNQ2/3/4/5 antibody



Description	Rabbit polyclonal to KCNQ2/3/4/5.
Model	STJ93823
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	ELISA, IHC
Immunogen	Synthesized peptide derived from human KCNQ2/3/4/5 around the non-phosphorylation site of T217/246/223/251.
Immunogen Region	160-240 aa
Gene ID	3785
Gene Symbol	KCNQ2
Dilution range	IHC 1:100-1:300ELISA 1:10000
Specificity	KCNQ2/3/4/5 Polyclonal Antibody detects endogenous levels of KCNQ2/3/4/5 protein.
Tissue Specificity	In adult and fetal brain. Highly expressed in areas containing neuronal cell bodies, low in spinal chord and corpus callosum. Isoform 2 is preferentially expressed in differentiated neurons. Isoform 6 is prominent in fetal brain, undifferentiated neuroblastoma cells and brain tumors.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	Potassium voltage-gated channel subfamily KQT member 2 KQT-like 2

Neuroblastoma-specific potassium channel subunit alpha KvLQT2 Voltage-gated potassium channel subunit Kv7.2

Molecular Weight	96.742 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:6296OMIM:121200
Alternative Names	Potassium voltage-gated channel subfamily KQT member 2 KQT-like 2 Neuroblastoma-specific potassium channel subunit alpha KvLQT2 Voltage-gated potassium channel subunit Kv7.2
Function	Probably important in the regulation of neuronal excitability. Associates with KCNQ3 to form a potassium channel with essentially identical properties to the channel underlying the native M-current, a slowly activating and deactivating potassium conductance which plays a critical role in determining the subthreshold electrical excitability of neurons as well as the responsiveness to synaptic inputs. KCNQ2/KCNQ3 current is blocked by linopirdine and XE991, and activated by the anticonvulsant retigabine. Muscarinic agonist oxotremorine-M strongly suppress KCNQ2/KCNQ3 current in cells in which cloned KCNQ2/KCNQ3 channels were coexpressed with M1 muscarinic receptors.
Sequence and Domain Family	The segment S4 is probably the voltage-sensor and is characterized by a series of positively charged amino acids at every third position.
Cellular Localization	Membrane. Multi-pass membrane protein.
Post-translational Modifications	In <i>Xenopus</i> oocytes KCNQ2/KCNQ3 heteromeric current can be increased by intracellular cyclic AMP, an effect that depends on phosphorylation of Ser-52 in the N-terminal region.