



KCNQ5 Monoclonal Antibody

Catalog No	YP-mAb-16439
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	KCNQ5
Immunogen	The antiserum was produced against synthesized peptide derived from human KCNQ5. AA range:637-686
Specificity	KCNQ5 Monoclonal Antibody detects endogenous levels of KCNQ5 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	Voltage-gated potassium channel subunit Kv7.5;Potassium voltage-gated channel subfamily KQT member 5;Kv7.5;KQT-like 5;KQT like 5;KCNQ5; Potassium channel subunit alpha KvLQT5
Observed Band	100-110kD
Calculated Molecular Weight	100-110kD
Cell Pathway	Cell membrane ; Multi-pass membrane protein .
Tissue Specificity	Strongly expressed in brain and skeletal muscle. In brain, expressed in cerebral cortex, occipital pole, frontal lobe and temporal lobe. Lower levels in hippocampus and putamen. Low to undetectable levels in medulla, cerebellum and thalamus.
Function	domain:The segment S4 is probably the voltage-sensor and is characterized by a series of positively charged amino acids at every third position., function:Probably important in the regulation of neuronal excitability. Associates with KCNQ3 to form a potassium channel which contributes to M-type current, a slowly activating and deactivating potassium conductance which plays a critical role in determining the subthreshold electrical excitability of neurons. May contribute, with other potassium channels, to the molecular diversity of an



heterogeneous population of M-channels, varying in kinetic and pharmacological properties, which underlie this physiologically important current. Insensitive to tetraethylammonium, but inhibited by barium, linopirdine and XE991. Activated by niflumic acid and the anticonvulsant retigabine. Muscarine suppresses KCNQ5 current in *Xenopus* oocytes in which cloned

Background

This gene is a member of the KCNQ potassium channel gene family that is differentially expressed in subregions of the brain and in skeletal muscle. The protein encoded by this gene yields currents that activate slowly with depolarization and can form heteromeric channels with the protein encoded by the KCNQ3 gene. Currents expressed from this protein have voltage dependences and inhibitor sensitivities in common with M-currents. They are also inhibited by M1 muscarinic receptor activation. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, May 2009],

matters needing attention

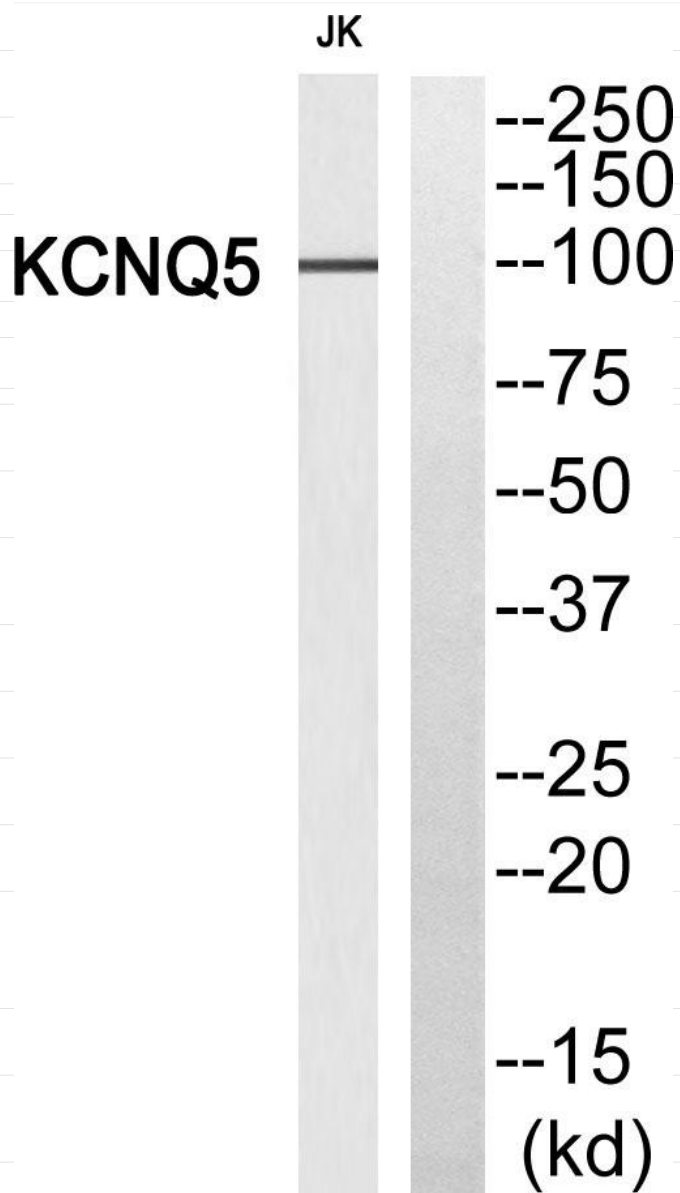
Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



Products Images



Western Blot analysis of various cells using KCNQ5
Monoclonal Antibody