

## KCNQ5 Polyclonal Antibody

<b>Catalog No :</b>	YT2460
<b>Reactivity :</b>	Human;Mouse
<b>Applications :</b>	WB;ELISA;IHC
<b>Target :</b>	KCNQ5
<b>Fields :</b>	>>Cholinergic synapse
<b>Gene Name :</b>	KCNQ5
<b>Protein Name :</b>	Potassium voltage-gated channel subfamily KQT member 5
<b>Human Gene Id :</b>	56479
<b>Human Swiss Prot No :</b>	Q9NR82
<b>Mouse Gene Id :</b>	226922
<b>Mouse Swiss Prot No :</b>	Q9JK45
<b>Immunogen :</b>	The antiserum was produced against synthesized peptide derived from human KCNQ5. AA range:637-686
<b>Specificity :</b>	KCNQ5 Polyclonal Antibody detects endogenous levels of KCNQ5 protein.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Polyclonal, Rabbit,IgG
<b>Dilution :</b>	WB 1:500-2000;IHC 1:50-300; ELISA 2000-20000
<b>Purification :</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Concentration :</b>	1 mg/ml

**Storage Stability :** -15°C to -25°C/1 year(Do not lower than -25°C)

**Observed Band :** 100-110kD

**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],

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**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

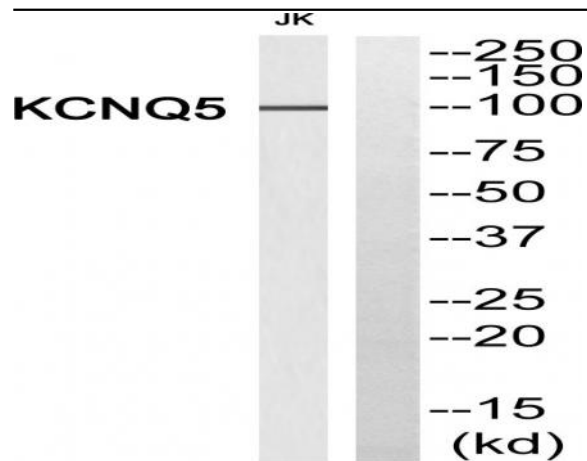
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**Subcellular Location :** Cell membrane ; Multi-pass membrane protein .

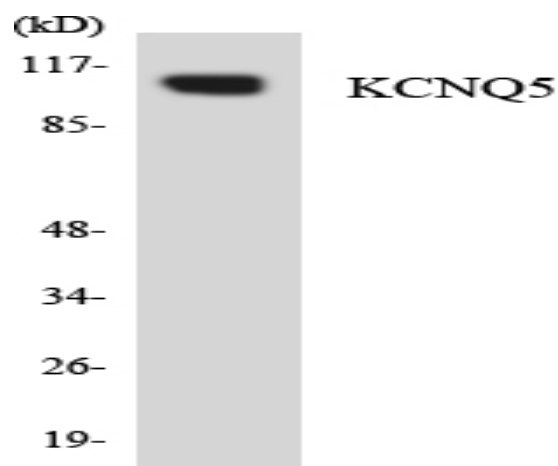
**Expression :** Strongly expressed in brain and skeletal muscle. In brain, expressed in cerebral cortex, occipital pole, frontal lobe and temporal lobe. Lower levels in hippocampus and putamen. Low to undetectable levels in medulla, cerebellum and thalamus.

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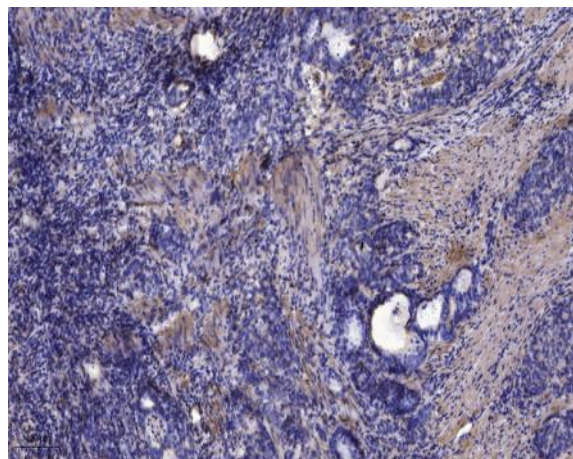
## Products Images



Western blot analysis of KCNQ5 Antibody. The lane on the right is blocked with the KCNQ5 peptide.



Western blot analysis of the lysates from COLO205 cells using KCNQ5 antibody.



Immunohistochemical analysis of paraffin-embedded human Gastric adenocarcinoma. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).

Western Blot analysis of Various cells using primary antibody at 1:1000 dilution 4°C, overnight. Secondary antibody(catalog#:RS23920) was diluted at 1:10000 25°C 1.5hours

