

**KCNQ5 Antibody (C-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP16776b****Specification**

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**KCNQ5 Antibody (C-term) - Product Information**

Application	WB,E
Primary Accession	<a href="#">Q9NR82</a>
Other Accession	<a href="#">NP_001153602.1</a> , <a href="#">NP_001153604.1</a>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	102179
Antigen Region	781-809

**KCNQ5 Antibody (C-term) - Additional Information****Gene ID** 56479**Other Names**

Potassium voltage-gated channel subfamily KQT member 5, KQT-like 5, Potassium channel subunit alpha KvLQT5, Voltage-gated potassium channel subunit Kv75, KCNQ5

**Target/Specificity**

This KCNQ5 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 781-809 amino acids from the C-terminal region of human KCNQ5.

**Dilution**

WB~~1:1000

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

KCNQ5 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**KCNQ5 Antibody (C-term) - Protein Information****Name** KCNQ5**Function** 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. Therefore, it is important in the regulation of neuronal excitability. May contribute, with other potassium channels, to the molecular diversity of a 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. As the native M-channel, the potassium channel composed of KCNQ3 and KCNQ5 is also suppressed by activation of the muscarinic acetylcholine receptor CHRM1.

#### Cellular Location

Cell membrane; Multi-pass membrane protein

#### Tissue Location

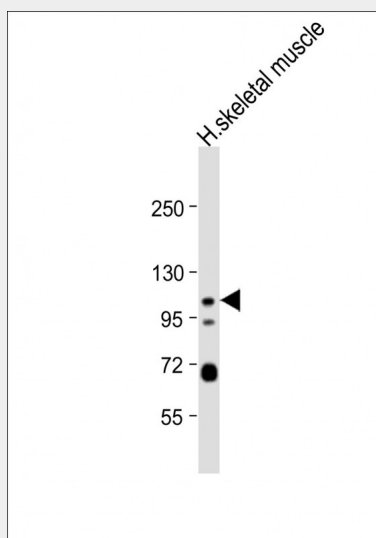
Strongly expressed in brain and skeletal muscle. In brain, expressed in cerebral cortex, occipital pole, frontal lobe and temporal lobe. Lower levels in hippocampus and putamen. Low to undetectable levels in medulla, cerebellum and thalamus

#### KCNQ5 Antibody (C-term) - Protocols

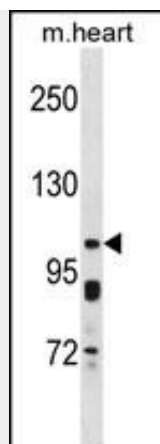
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### KCNQ5 Antibody (C-term) - Images



Anti-KCNQ5 Antibody (C-term) at 1:1000 dilution + human skeletal muscle lysate  
Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 102 kDa Blocking/Dilution buffer: 5% NFD/MTBST.



KCNQ5 Antibody (C-term) (Cat. #AP16776b) western blot analysis in mouse heart tissue lysates (35ug/lane). This demonstrates the KCNQ5 antibody detected the KCNQ5 protein (arrow).

#### **KCNQ5 Antibody (C-term) - 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.

#### **KCNQ5 Antibody (C-term) - References**

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Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :  
Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009)  
Roura-Ferrer, M., et al. Cell. Physiol. Biochem. 24 (5-6), 325-334 (2009) :  
Bal, M., et al. J. Biol. Chem. 283(45):30668-30676(2008)