

KCNQ5 Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP16776b**Specification**

KCNQ5 Antibody (C-term) Blocking Peptide - Product InformationPrimary Accession [Q9NR82](#)**KCNQ5 Antibody (C-term) Blocking Peptide - 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

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

KCNQ5 Antibody (C-term) Blocking Peptide - 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) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

KCNQ5 Antibody (C-term) Blocking Peptide - Images

KCNQ5 Antibody (C-term) Blocking Peptide - 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) Blocking Peptide - References

Bailey, S.D., et al. Diabetes Care (2010) In press : 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)