

KCNC1 Antibody (C-term) Blocking Peptide

Synthetic peptide Catalog # BP14545b

Specification

KCNC1 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession

P48547

KCNC1 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 3746

Other Names

Potassium voltage-gated channel subfamily C member 1, NGK2, Voltage-gated potassium channel subunit Kv31, Voltage-gated potassium channel subunit Kv4, KCNC1

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.

KCNC1 Antibody (C-term) Blocking Peptide - Protein Information

Name KCNC1

Function

Voltage-gated potassium channel that plays an important role in the rapid repolarization of fast-firing brain neurons. The channel opens in response to the voltage difference across the membrane, forming a potassium-selective channel through which potassium ions pass in accordance with their electrochemical gradient (PubMed:25401298). Can form functional homotetrameric channels and heterotetrameric channels that contain variable proportions of KCNC2, and possibly other family members as well. Contributes to fire sustained trains of very brief action potentials at high frequency in pallidal neurons.

Cellular Location

Cell membrane; Multi-pass membrane protein. Cell projection, axon {ECO:0000250|UniProtKB:P25122}. Presynaptic cell membrane

{ECO:0000250|UniProtKB:P25122}. Note=Localizes in parallel fiber membranes, distributed on the perisynaptic and extrasynaptic membranes away from the active zones.

{ECO:0000250|UniProtKB:P25122}



KCNC1 Antibody (C-term) Blocking Peptide - Protocols

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

Blocking Peptides

KCNC1 Antibody (C-term) Blocking Peptide - Images

KCNC1 Antibody (C-term) Blocking Peptide - Background

The Shaker gene family of Drosophila encodes components ofvoltage-gated potassium channels and is comprised of foursubfamilies. Based on sequence similarity, this gene is similar toone of these subfamilies, namely the Shaw subfamily. The proteinencoded by this gene belongs to the delayed rectifier class ofchannel proteins and is an integral membrane protein that mediatesthe voltage-dependent potassium ion permeability of excitablemembranes. Multiple transcript variants encoding different isoformshave been inferred for this gene based on orthologous loci.

KCNC1 Antibody (C-term) Blocking Peptide - References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009)Wang, Z., et al. J. Gen. Physiol. 133(4):361-374(2009)Gutman, G.A., et al. Pharmacol. Rev. 57(4):473-508(2005)Devaux, J., et al. J. Neurosci. 23(11):4509-4518(2003)