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KCNN1 Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP17223b

Specification

KCNN1 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession Q92952

KCNN1 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 3780

Other Names
Small conductance calcium-activated potassium channel protein 1, SK1, SKCa 1, SKCa1, KCa21, KCNN1, SK

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.

KCNN1 Antibody (C-term) Blocking Peptide - Protein Information

Name KCNN1 {ECO:0000303|PubMed:10516439, ECO:0000312|HGNC:HGNC:6290}

Function
Small conductance calcium-activated potassium channel that mediates the voltage-independent transmembrane transfer of potassium across the cell membrane through a constitutive interaction with calmodulin which binds the intracellular calcium allowing its opening (PubMed:17142458, PubMed:8781233, PubMed:9287325). The current is characterized by a voltage-independent activation, an intracellular calcium concentration increase-dependent activation and a single- channel conductance of about 3 picosiemens (PubMed:8781233). Also presents an inwardly rectifying current, thus reducing its already small outward conductance of potassium ions, which is particularly the case when the membrane potential displays positive values, above + 20 mV (Probable). Activation is followed by membrane hyperpolarization (By similarity). Thought to regulate neuronal excitability by contributing to the slow component of synaptic afterhyperpolarization (By similarity).

Cellular Location
Membrane; Multi-pass membrane protein. Cytoplasm, myofibril, sarcomere, Z line

{ECO:0000250|UniProtKB:Q9EQR3}

KCNN1 Antibody (C-term) Blocking Peptide - Protocols

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

- Blocking Peptides

KCNN1 Antibody (C-term) Blocking Peptide - Images

KCNN1 Antibody (C-term) Blocking Peptide - Background

Action potentials in vertebrate neurons are followed by anafterhyperpolarization (AHP) that may persist for several secondsand may have profound consequences for the firing pattern of theneuron. Each component of the AHP is kinetically distinct and ismediated by different calcium-activated potassium channels. Theprotein encoded by this gene is activated before membranehyperpolarization and is thought to regulate neuronal excitabilityby contributing to the slow component of synaptic AHP. The encodedprotein is an integral membrane protein that forms avoltage-independent calcium-activated channel with three othercalmodulin-binding subunits. This gene is a member of the KCNNfamily of potassium channel genes.

KCNN1 Antibody (C-term) Blocking Peptide - References

Wu, C., et al. Proteomics 7(11):1775-1785(2007)Wei, A.D., et al. Pharmacol. Rev. 57(4):463-472(2005)Arnold, S.J., et al. Neuroreport 14(2):191-195(2003)Boettger, M.K., et al. Brain 125 (PT 2), 252-263 (2002) :Zhang, B.M., et al. Biochemistry 40(10):3189-3195(2001)