

KCNN1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP17223b

Specification

KCNN1 Antibody (C-term) - Product Information

WB,E Application **Primary Accession** 092952 NP 002239.2 Other Accession Reactivity Human Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 59987 Antigen Region 391-419

KCNN1 Antibody (C-term) - Additional Information

Gene ID 3780

Other Names

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

Target/Specificity

This KCNN1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 391-419 amino acids from the C-terminal region of human KCNN1.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

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

KCNN1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

KCNN1 Antibody (C-term) - 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

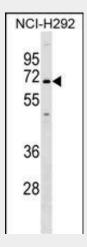
Membrane; Multi-pass membrane protein. Cytoplasm, myofibril, sarcomere, Z line {ECO:0000250|UniProtKB:Q9EQR3}

KCNN1 Antibody (C-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

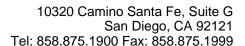
KCNN1 Antibody (C-term) - Images



KCNN1 Antibody (C-term) (Cat. #AP17223b) western blot analysis in NCI-H292 cell line lysates (35ug/lane). This demonstrates the KCNN1 antibody detected the KCNN1 protein (arrow).

KCNN1 Antibody (C-term) - Background

Action potentials in vertebrate neurons are followed by an afterhyperpolarization (AHP) that may persist for several seconds and may have profound consequences for the firing pattern of the neuron. Each component of the AHP is kinetically distinct and is





mediated by different calcium-activated potassium channels. The protein encoded by this gene is activated before membrane hyperpolarization and is thought to regulate neuronal excitability by contributing to the slow component of synaptic AHP. The encoded protein is an integral membrane protein that forms a voltage-independent calcium-activated channel with three other calmodulin-binding subunits. This gene is a member of the KCNN family of potassium channel genes.

KCNN1 Antibody (C-term) - 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)