10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

KCNA6 Antibody (N-term) Blocking Peptide

Synthetic peptide
Catalog # BP17189a

Specification

KCNA6 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession P17658

KCNA6 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 3742

Other Names
Potassium voltage-gated channel subfamily A member 6, Voltage-gated potassium channel HBK2, Voltage-gated potassium channel subunit Kv16, KCNA6

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.

KCNA6 Antibody (N-term) Blocking Peptide - Protein Information

Name KCNA6

Function
Voltage-gated potassium channel that mediates transmembrane potassium transport in excitable membranes. Forms tetrameric potassium- selective channels through which potassium ions pass in accordance with their electrochemical gradient (PubMed:2347305, PubMed:14575698). The channel alternates between opened and closed conformations in response to the voltage difference across the membrane (PubMed:2347305, PubMed:14575698). Can form functional homotetrameric channels and heterotetrameric channels that contain variable proportions of KCNA1, KCNA2, KCNA4, KCNA6, and possibly other family members as well; channel properties depend on the type of alpha subunits that are part of the channel (By similarity). Channel properties are modulated by cytoplasmic beta subunits that regulate the subcellular location of the alpha subunits and promote rapid inactivation (By similarity). Homotetrameric channels display rapid activation and slow inactivation (PubMed:2347305).

Cellular Location

Cell membrane; Multi-pass membrane protein

KCNA6 Antibody (N-term) Blocking Peptide - Protocols

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

- Blocking Peptides

KCNA6 Antibody (N-term) Blocking Peptide - Images

KCNA6 Antibody (N-term) Blocking Peptide - Background

Potassium channels represent the most complex class ofvoltage-gated ion channels from both functional and structuralstandpoints. Their diverse functions include regulatingneurotransmitter release, heart rate, insulin secretion, neuronalexcitability, epithelial electrolyte transport, smooth musclecontraction, and cell volume. Four sequence-related potassiumchannel genes - shaker, shaw, shab, and shal - have been identifiedin Drosophila, and each has been shown to have human homolog(s).This gene encodes a member of the potassium channel, voltage-gated,shaker-related subfamily. This member contains sixmembrane-spanning domains with a shaker-type repeat in the fourthsegment. It belongs to the delayed rectifier class. The codingregion of this gene is intronless, and the gene is clustered withgenes KCNA1 and KCNA5 on chromosome 12.

KCNA6 Antibody (N-term) Blocking Peptide - References

Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :Tan, K.M., et al. Neurology 70(20):1883-1890(2008)Yusifov, T., et al. Proc. Natl. Acad. Sci. U.S.A. 105(1):376-381(2008)Lamesch, P., et al. Genomics 89(3):307-315(2007)Gutman, G.A., et al. Pharmacol. Rev. 57(4):473-508(2005)