

KCNIP2 Antibody (N-term) Blocking Peptide

Synthetic peptide Catalog # BP19353a

Specification

KCNIP2 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession

KCNIP2 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 30819

Other Names

Kv channel-interacting protein 2, KChIP2, A-type potassium channel modulatory protein 2, Cardiac voltage-gated potassium channel modulatory subunit, Potassium channel-interacting protein 2, KCNIP2, KCHIP2

Q9NS61

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.

KCNIP2 Antibody (N-term) Blocking Peptide - Protein Information

Name KCNIP2

Synonyms KCHIP2

Function

Regulatory subunit of Kv4/D (Shal)-type voltage-gated rapidly inactivating A-type potassium channels. Modulates channel density, inactivation kinetics and rate of recovery from inactivation in a calcium-dependent and isoform-specific manner. In vitro, modulates KCND2/Kv4.2 and KCND3/Kv4.3 currents. Involved in KCND2 and KCND3 trafficking to the cell surface. May be required for the expression of I(To) currents in the heart (By similarity).

Cellular Location

[Isoform 1]: Cell membrane {ECO:0000250|UniProtKB:Q9JM59}; Lipid-anchor {ECO:0000250|UniProtKB:Q9JM59}. Note=Detected on lipid rafts (By similarity). {ECO:0000250|UniProtKB:Q9JM59} [Isoform 6]: Cell membrane {ECO:0000250|UniProtKB:Q9JM59}; Lipid-anchor {ECO:0000250|UniProtKB:Q9JM59}

Tissue Location

Expressed in brain. Colocalizes with KCND2 in excitatory neurons including cortical and



hippocampal CA1 pyramidal cells. Isoform 3 is expressed in heart and in umbilical vein endothelial cells. Not expressed in fetal heart

KCNIP2 Antibody (N-term) Blocking Peptide - Protocols

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

Blocking Peptides

KCNIP2 Antibody (N-term) Blocking Peptide - Images

KCNIP2 Antibody (N-term) Blocking Peptide - Background

This gene encodes a member of the family of voltage-gatedpotassium (Kv) channel-interacting proteins (KCNIPs), which belongsto the recoverin branch of the EF-hand superfamily. Members of theKCNIP family are small calcium binding proteins. They all haveEF-hand-like domains, and differ from each other in the N-terminus. They are integral subunit components of native Kv4 channelcomplexes. They may regulate A-type currents, and hence neuronalexcitability, in response to changes in intracellular calcium. Multiple alternatively spliced transcript variants encoding distinct isoforms have been identified from this gene. [provided byRefSeg].

KCNIP2 Antibody (N-term) Blocking Peptide - References

Foeger, N.C., et al. J. Biol. Chem. 285(43):33413-33422(2010)Lundby, A., et al. Br. J. Pharmacol. 160(8):2028-2044(2010)Levy, D.I., et al. J. Physiol. (Lond.) 588 (PT 14), 2657-2668 (2010) :Cotella, D., et al. Pflugers Arch. 460(1):87-97(2010)Tan, X.Q., et al. Zhonghua Xin Xue Guan Bing Za Zhi 37(6):509-513(2009)