

KChIP1 Antibody (N-term) Blocking Peptide

Synthetic peptide Catalog # BP1571a

Specification

KChIP1 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession

Q9NZI2

KChIP1 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 30820

Other Names

Kv channel-interacting protein 1, KChIP1, A-type potassium channel modulatory protein 1, Potassium channel-interacting protein 1, Vesicle APC-binding protein, KCNIP1, KCHIP1, VABP

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP1571a was selected from the N-term region of human KChIP1 . A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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.

KChIP1 Antibody (N-term) Blocking Peptide - Protein Information

Name KCNIP1 (HGNC:15521)

Function

Regulatory subunit of Kv4/D (Shal)-type voltage-gated rapidly inactivating A-type potassium channels (PubMed:10676964, PubMed:11423117, PubMed:17187064, PubMed:34552243, PubMed:34997220). Regulates channel density, inactivation kinetics and rate of recovery from inactivation in a calcium-dependent and isoform-specific manner (PubMed:10676964, PubMed:11423117, PubMed:17187064, PubMed:<a



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href="http://www.uniprot.org/citations/34552243" target=" blank">34552243, PubMed:34997220). In vitro, modulates KCND1/Kv4.1 and KCND2/Kv4.2 currents (PubMed: 34552243). Increases the presence of KCND2 at the cell surface (PubMed:12829703).

Cellular Location

Cell membrane; Peripheral membrane protein. Cytoplasm. Cell projection, dendrite {ECO:0000250|UniProtKB:Q8R426}

Tissue Location

Isoform 1 and isoform 2 are expressed in brain and kidney. Isoform 1 is also expressed in liver, pancreas, skeletal muscle, small intestine and testis. Isoform 2 is also expressed in lung, pancreas, leukocytes, prostate and thymus

KChIP1 Antibody (N-term) Blocking Peptide - Protocols

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

Blocking Peptides

KChIP1 Antibody (N-term) Blocking Peptide - Images

KChIP1 Antibody (N-term) Blocking Peptide - Background

KChIP1 is a member of the family of voltage-gated potassium (Kv) channel-interacting proteins (KCNIPs), which belong to the recoverin branch of the EF-hand superfamily. Members of the KCNIP family are small calcium binding proteins. They all have EF-hand-like domains, and differ from each other in the N-terminus. They are integral subunit components of native Kv4 channel complexes. They may regulate A-type currents, and hence neuronal excitability, in response to changes in intracellular calcium.

KChIP1 Antibody (N-term) Blocking Peptide - References

Bahring, R., et al., J. Biol. Chem. 276(26):23888-23894 (2001). An, W.F., et al., Nature 403(6769):553-556 (2000).