

KChIP2c Antibody (N-term Y20) Blocking Peptide

Synthetic peptide Catalog # BP1573d

Specification

KChIP2c Antibody (N-term Y20) Blocking Peptide - Product Information

Primary Accession

Q9NS61

KChIP2c Antibody (N-term Y20) 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

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP1573d was selected from the N-term region of human KChIP2c. 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.

KChIP2c Antibody (N-term Y20) 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

KChIP2c Antibody (N-term Y20) Blocking Peptide - Protocols

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

• Blocking Peptides

KChIP2c Antibody (N-term Y20) Blocking Peptide - Images

KChIP2c Antibody (N-term Y20) Blocking Peptide - Background

KChIP2c is a member of the family of voltage-gated potassium (Kv) channel-interacting proteins (KCNIPs), which belongs 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.

KChIP2c Antibody (N-term Y20) Blocking Peptide - References

Kim, L.A., et al., J. Biol. Chem. 279(7):5549-5554 (2004). Ren, X., et al., J. Biol. Chem. 278(44):43564-43570 (2003). Deschenes, I., et al., Circulation 106(4):423-429 (2002). Ohya, S., et al., Biochem. Biophys. Res. Commun. 282(1):96-102 (2001). Bahring, R., et al., J. Biol. Chem. 276(26):23888-23894 (2001).