

KCHIP4 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP1574a**Specification**

KCHIP4 Antibody (N-term) Blocking Peptide - Product InformationPrimary Accession [Q6PIL6](#)**KCHIP4 Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 80333**Other Names**

Kv channel-interacting protein 4, KCHIP4, A-type potassium channel modulatory protein 4, Calsenilin-like protein, Potassium channel-interacting protein 4, KCNIP4, CALP, KCHIP4

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP1574a](/product/products/AP1574a) was selected from the N-term region of human KCHIP4. 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.

KCHIP4 Antibody (N-term) Blocking Peptide - Protein Information**Name** KCNIP4**Synonyms** CALP, KCHIP4**Function**

Regulatory subunit of Kv4/D (Shal)-type voltage-gated rapidly inactivating A-type potassium channels. Modulates KCND2 channel density, inactivation kinetics and rate of recovery from inactivation in a calcium-dependent and isoform-specific manner (PubMed: [11847232](http://www.uniprot.org/citations/11847232), PubMed: [18957440](http://www.uniprot.org/citations/18957440), PubMed: [23576435](http://www.uniprot.org/citations/23576435)). Modulates KCND3/Kv4.3 currents (PubMed: [23576435](http://www.uniprot.org/citations/23576435)). Isoform 4 does not increase KCND2 expression at the cell membrane (PubMed: [18957440](http://www.uniprot.org/citations/18957440))

target="_blank">18957440). Isoform 4 retains KCND3 in the endoplasmic reticulum and negatively regulates its expression at the cell membrane.

Cellular Location

Cell membrane; Peripheral membrane protein. Cytoplasm. Peroxisome

Tissue Location

Predominantly expressed in brain.

KChIP4 Antibody (N-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

KChIP4 Antibody (N-term) Blocking Peptide - Images**KChIP4 Antibody (N-term) Blocking Peptide - Background**

KChIP4 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. This protein member also interacts with presenilin.

KChIP4 Antibody (N-term) Blocking Peptide - References

Morohashi, Y., et al., J. Biol. Chem. 277(17):14965-14975 (2002). Holmqvist, M.H., et al., Proc. Natl. Acad. Sci. U.S.A. 99(2):1035-1040 (2002).