

# KCNIP4 Antibody (N-term) Blocking Peptide

Synthetic peptide Catalog # BP16773a

# **Specification**

# KCNIP4 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession

Q6PIL6

# KCNIP4 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

#### **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.

# KCNIP4 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:<a href="http://www.uniprot.org/citations/11847232" target="\_blank">11847232</a>, PubMed:<a href="http://www.uniprot.org/citations/18957440" target="\_blank">18957440</a>, PubMed:<a href="http://www.uniprot.org/citations/23576435" target="\_blank">23576435</a>). Modulates KCND3/Kv4.3 currents (PubMed:<a href="http://www.uniprot.org/citations/23576435" target="\_blank">23576435</a>). Isoform 4 does not increase KCND2 expression at the cell membrane (PubMed:<a href="http://www.uniprot.org/citations/18957440" target="\_blank">18957440</a>). 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.

### KCNIP4 Antibody (N-term) Blocking Peptide - Protocols

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

Blocking Peptides

KCNIP4 Antibody (N-term) Blocking Peptide - Images

# KCNIP4 Antibody (N-term) Blocking Peptide - Background

This gene encodes a member of the family of voltage-gatedpotassium (Kv) channel-interacting proteins (KCNIPs), which belongto 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. Thisprotein member also interacts with presentiin. Multiplealternatively spliced transcript variants encoding distinctisoforms have been identified for this gene.

### KCNIP4 Antibody (N-term) Blocking Peptide - References

Horinouchi, M., et al. Pediatr Hematol Oncol 27(5):344-354(2010)Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :Lin, L., et al. Mol. Cell. Neurosci. 43(3):315-325(2010)Ding, H., et al. Stroke 41(1):177-180(2010)Trynka, G., et al. Gut 58(8):1078-1083(2009)