

KChIP3 Antibody (N-term M1) Blocking Peptide Synthetic peptide Catalog # BP1572a

Specification

KChIP3 Antibody (N-term M1) Blocking Peptide - Product Information

Primary Accession

<u>Q9Y2W7</u>

KChIP3 Antibody (N-term M1) Blocking Peptide - Additional Information

Gene ID 30818

Other Names

Calsenilin, A-type potassium channel modulatory protein 3, DRE-antagonist modulator, DREAM, Kv channel-interacting protein 3, KChIP3, KCNIP3, CSEN, DREAM, KCHIP3

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP1572a was selected from the N-term region of human KChIP3 . 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.

KChIP3 Antibody (N-term M1) Blocking Peptide - Protein Information

Name KCNIP3

Synonyms CSEN, DREAM, KCHIP3

Function

Calcium-dependent transcriptional repressor that binds to the DRE element of genes including PDYN and FOS. Affinity for DNA is reduced upon binding to calcium and enhanced by binding to magnesium. Seems to be involved in nociception (By similarity).

Cellular Location

Cytoplasm. Cell membrane; Lipid-anchor. Endoplasmic reticulum. Golgi apparatus. Nucleus. Note=Also membrane-bound, associated with the plasma membrane (PubMed:15485870). In the presence of PSEN2 associated with the endoplasmic reticulum and Golgi. The sumoylated form is present only in the nucleus.



Tissue Location

Highly expressed in brain. Widely expressed at lower levels. Expression levels are elevated in brain cortex regions affected by Alzheimer disease.

KChIP3 Antibody (N-term M1) Blocking Peptide - Protocols

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

Blocking Peptides

KChIP3 Antibody (N-term M1) Blocking Peptide - Images

KChIP3 Antibody (N-term M1) Blocking Peptide - Background

KChIP3 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 is also shown to function as a calcium-regulated transcriptional repressor, and to interact with presenilins. Mutations in the presenilin genes have been implicated in Alzheimer's disease. Due to utilization of an alternate in-frame translation start codon, the gene for this protein encodes two isoforms with different sizes.

KChIP3 Antibody (N-term M1) Blocking Peptide - References

Choi, E.K., et al., Mol. Cell. Neurosci. 23(3):495-506 (2003).Hong, Y.M., et al., Neurosci. Lett. 340(1):33-36 (2003).Schrader, L.A., et al., J. Neurosci. 22(23):10123-10133 (2002).Lilliehook, C., et al., Mol. Cell. Neurosci. 19(4):552-559 (2002).Cheng, H.Y., et al., Cell 108(1):31-43 (2002).