10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

KChIP3 Antibody (N-term M1)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP1572a

Specification

KChIP3 Antibody (N-term M1) - Product Information

Application	**IF, IHC-P, WB,E**
Primary Accession	Q9Y2W7
Reactivity	**Human, Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**29231**
Antigen Region	**1-30**

KChIP3 Antibody (N-term M1) - 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
This KChIP3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human KChIP3.

Dilution
IF~~1:10~50
IHC-P~~1:50~100
WB~~1:1000
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
KChIP3 Antibody (N-term M1) is for research use only and not for use in diagnostic or therapeutic procedures.

KChIP3 Antibody (N-term M1) - 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.

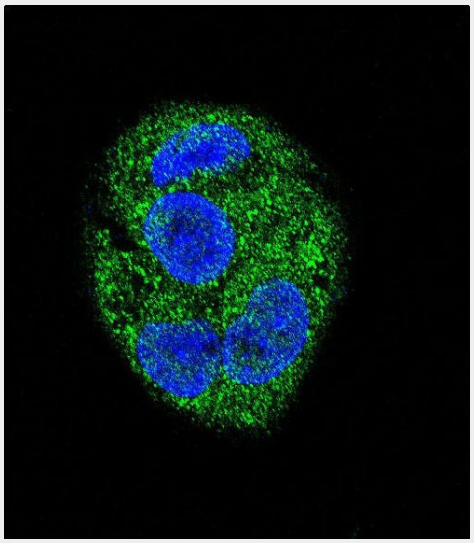
Tissue Location
Highly expressed in brain. Widely expressed at lower levels. Expression levels are elevated in brain cortex regions affected by Alzheimer disease.

KChIP3 Antibody (N-term M1) - Protocols

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

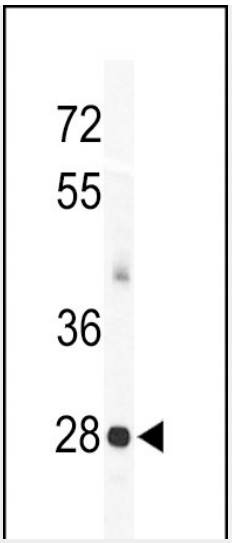
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KChIP3 Antibody (N-term M1) - Images

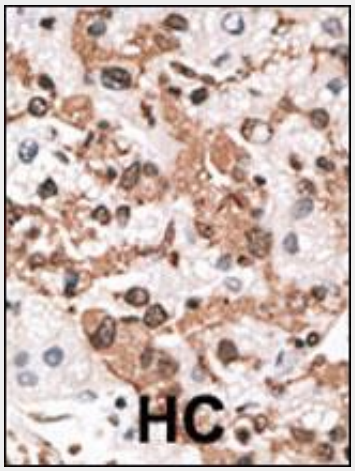


Confocal immunofluorescent analysis of KChIP3 Antibody (N-term M1) (Cat#AP1572a) with HepG2 cell followed by Alexa Fluor 488-conjugated goat anti-rabbit lgG (green). DAPI was used to stain the cell nuclear (blue).

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999



Western blot analysis of KChIP3 Antibody (N-term M1) (Cat.# AP1572a) in mouse heart tissue lysates (35ug/lane). KChIP3(arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

Formalin-fixed and paraffin-embedded human brain tissue reacted with KChIP3 Antibody (N-term M1) (Cat.#AP1572a), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical

relevance has not been evaluated.

KChIP3 Antibody (N-term M1) - 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) - 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).