

Product Name: DREAM (phospho Ser63) Rabbit Polyclonal Antibody**Catalog #: APRab04564**

For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,IHC,ICC/IF,ELISA
Reactivity	Human,Mouse
Conjugation	Unconjugated
Modification	Phosphorylated
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:200-1:1000,ELISA 1:10000-1:20000
Molecular Weight	29kDa

Antigen Information

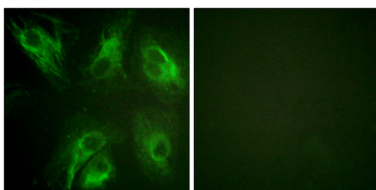
Gene Name	KCNIP3
Alternative Names	KCNIP3; CSEN; DREAM; KCHIP3; Calsenilin; A-type potassium channel modulatory protein 3; DRE-antagonist modulator; DREAM; Kv channel-interacting protein 3; KChIP3
Gene ID	30818.0
SwissProt ID	Q9Y2W7
Immunogen	The antiserum was produced against synthesized peptide derived from human Calsenilin/KCNIP3 around the phosphorylation site of Ser63. AA range:29-78

Background

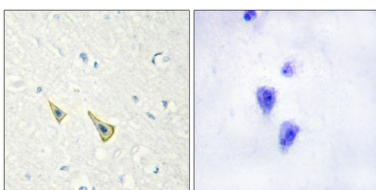
This gene encodes a member of the family of voltage-gated potassium (Kv) channel-interacting proteins, which belong to the recoverin branch of the EF-hand superfamily. Members of this family are small calcium binding proteins containing EF-hand-like domains. They are integral subunit components of native Kv4 channel complexes that may regulate A-type currents, and hence neuronal excitability, in response to changes in intracellular calcium. The encoded protein also functions as a calcium-regulated transcriptional repressor, and interacts with presenilins. Alternatively spliced transcript variants encoding different isoforms have been described. [provided by RefSeq, Jul 2008],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.,function:May play a role in the regulation of PSEN2 proteolytic processing and apoptosis. Together with PSEN2 involved in modulation of beta-amyloid formation.,function:Regulatory subunit of Kv4/D (Shal)-type voltage-gated rapidly inactivating A-type potassium channels. Probably modulates channels 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 probably KCND3 trafficking to the cell surface.,PTM:Palmitoylated. Palmitoylation enhances association with the plasma membrane.,PTM:Phosphorylation at Ser-63 inhibits cleavage by CASP3.,PTM:Proteolytically cleaved by caspase-3.,similarity:Belongs to the recoverin family.,similarity:Contains 4 EF-hand domains.,subcellular location:Also membrane-bound, associated with the plasma membrane (By similarity). In the presence of PSEN2 associated with the endoplasmic reticulum and Golgi.,subunit:Binds to DNA as a homomultimer. Dimerization is induced by binding to calcium. Component of heteromultimeric potassium channels. Interacts with KCND2 and KCND3 (By similarity). Interacts with the C-terminus of PSEN1 and PSEN2 and with PSEN2 CTF subunit. Associates with KCN1.,tissue specificity:Highly expressed in brain. Widely expressed at lower levels. Expression levels are elevated in brain cortex regions affected by Alzheimer disease.,

Research Area

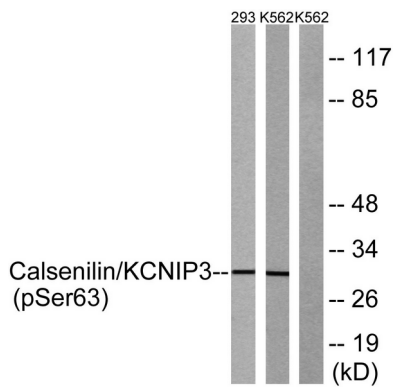
Image Data



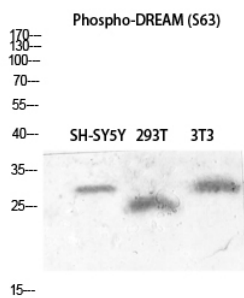
Immunofluorescence analysis of HeLa cells, using Calsenilin/KCNIP3 (Phospho-Ser63) Antibody. The picture on the right is blocked with the phospho peptide.



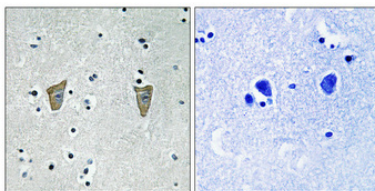
Immunohistochemistry analysis of paraffin-embedded human brain, using Calsenilin/KCNIP3 (Phospho-Ser63) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from K562 cells treated with forskolin 40nM 30' and 293 cells treated with PMA 125ng/ml 30', using Calsenilin/KCNIP3 (Phospho-Ser63) Antibody. The lane on the right is blocked with the phospho peptide.



Western blot analysis of SH-SY5Y 293T 3T3 lysis using Phospho-DREAM (S63) antibody. Antibody was diluted at 1:500



Immunohistochemical analysis of paraffin-embedded Human brain. Antibody was diluted at 1:100 (4°, overnight). High-pressure and temperature Tris-EDTA, pH 8.0 was used for antigen retrieval. Negative control (right) obtained from antibody was pre-absorbed by immunogen peptide.