

Summary

Production Name	DREAM Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	IF,IHC,WB,ELISA
Reactivity	Human,Mouse

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

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.The antiserum was produced against synthesized peptide derived from human Calsenilin/KCNIP3. AA range:29-78

Application

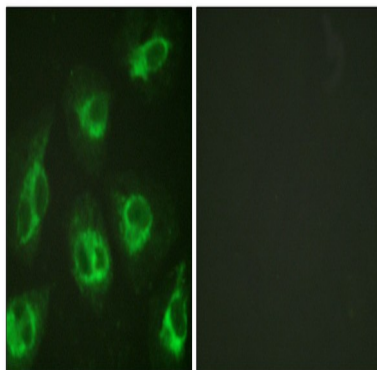
Dilution Ratio	WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:20000. Not yet tested in other applications.
Molecular Weight	29kD

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

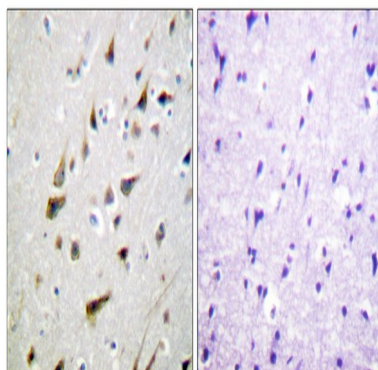
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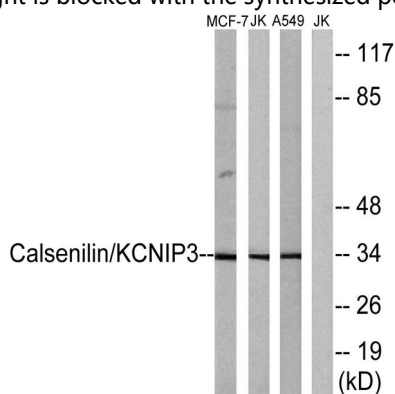
Product Name: DREAM Rabbit Polyclonal Antibody
Catalog #: APRab10160



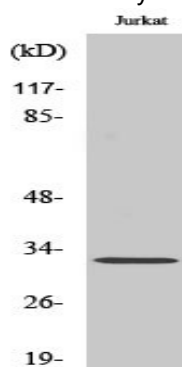
Immunofluorescence analysis of HeLa cells, using Calsenilin/KCNIP3 Antibody. The picture on the right is blocked with the synthesized peptide.



Immunohistochemistry analysis of paraffin-embedded human brain tissue, using Calsenilin/KCNIP3 Antibody. The picture on the right is blocked with the synthesized peptide.

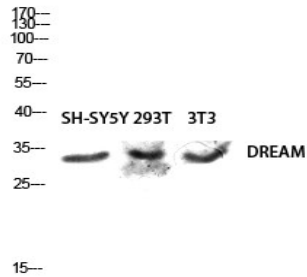


Western blot analysis of lysates from MCF-7, Jurkat, and A549 cells, using Calsenilin/KCNIP3 Antibody. The lane on the right is blocked with the synthesized peptide.



Western Blot analysis of various cells using DREAM Polyclonal Antibody diluted at 1 : 500

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

Note

For research use only.