

Product name:	DREAM (phospho Ser63) Rabbit Polyclonal Antibody
Cat number:	ABN04564
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from human Calsenilin/KCNIP3 around the phosphorylation site of Ser63. AA range:29-78
Reactivity:	Human,Mouse
Applications:	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:200-1:1000,ELISA 1:10000-1:20000
Molecular Weight:	29kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

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.,