
Product Name: CaMKII α / β / δ Rabbit Polyclonal Antibody**Catalog #: APRab07886**

For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,IHC,ICC/IF,ELISA
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
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 1:50-1:200,ELISA 1:5000-1:10000**Molecular Weight****Antigen Information**

Gene Name	CAMK2A CAMK2A; CAMKA; KIAA0968; Calcium/calmodulin-dependent protein kinase type II subunit
Alternative Names	alpha; CaM kinase II subunit alpha; CaMK-II subunit alpha; CAMK2B; CAM2; CAMK2; CAMKB; Calcium/calmodulin-dependent protein kinase type II subunit beta; Ca
Gene ID	815/816/817
SwissProt ID	Q9UQM7/Q13554/Q13557
Immunogen	The antiserum was produced against synthesized peptide derived from human CaMK2 alpha/beta/delta. AA range:271-320

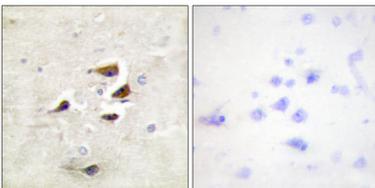
Background

The product of this gene belongs to the serine/threonine protein kinases family, and to the Ca(2+)/calmodulin-dependent protein kinases subfamily. Calcium signaling is crucial for several aspects of plasticity at glutamatergic synapses. This calcium-calmodulin-dependent protein kinase is composed of four different chains: alpha, beta, gamma, and delta. The alpha chain encoded by this gene is required for hippocampal long-term potentiation (LTP) and spatial learning. In addition to its calcium-calmodulin (CaM)-dependent activity, this protein can undergo autophosphorylation, resulting in CaM-independent activity. Two transcript variants encoding distinct isoforms have been identified for this gene. [provided by RefSeq, Nov 2008], catalytic activity: ATP + a protein = ADP + a phosphoprotein., enzyme regulation: Autophosphorylation of Thr-286 allows the kinase to switch from a calmodulin-dependent to a calmodulin-independent state., function: CaM-kinase II (CAMK2) is a prominent kinase in the central nervous system that may function in long-term potentiation and neurotransmitter release. Member of the NMDAR signaling complex in excitatory synapses it may regulate NMDAR-dependent potentiation of the AMPAR and synaptic plasticity., similarity: Belongs to the protein kinase superfamily., similarity: Belongs to the protein kinase superfamily. CAMK Ser/Thr protein kinase family. CaMK subfamily., similarity: Contains 1 protein kinase domain., subcellular location: Postsynaptic lipid rafts., subunit: CAMK2 is composed of four different chains: alpha, beta, gamma, and delta. The different isoforms assemble into homo- or heteromultimeric holoenzymes composed of 8 to 12 subunits. Interacts with BAALC, MPDZ, SYN1, CAMK2N2 and SYNGAP1.,

Research Area

ErbB_HER; Calcium; Oocyte meiosis; WNT; WNT-T CELL Long-term potentiation; Neurotrophin; Olfactory transduction; GnRH; Melanogenesis; Glioma;

Image Data



Immunohistochemistry analysis of paraffin-embedded human brain tissue, using CaMK2 alpha/beta/delta Antibody. The picture on the right is blocked with the synthesized peptide.