



## CaMKIIα/β/δ rabbit pAb

Cat#: orb770516 (Manual)

For research use only. Not intended for diagnostic use.

**Product Name** CaMKIIα/β/δ rabbit pAb

Host species Rabbit

Applications IHC;IF;WB;ELISA

Species Cross-Reactivity Human; Mouse; Rat

Recommended dilutions WB 1:500-2000 Immunohistochemistry: 1/100 - 1/300. ELISA: 1/5000. Not

yet tested in other applications.

Immunogen The antiserum was produced against synthesized peptide derived from

human CaMK2 alpha/beta/delta. AA range:271-320

Specificity CaMKIIα/β/δ Polyclonal Antibody detects endogenous levels of

CaMKII $\alpha/\beta/\delta$  protein.

**Formulation** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium

azide..

Storage Store at -20°C. Avoid repeated freeze-thaw cycles.

Protein Name Calcium/calmodulin-dependent protein kinase type II subunit alpha

Gene Name CAMK2A

Cellular localization Cell junction, synapse. Cell junction, synapse, postsynaptic density. Cell

projection, dendritic spine. Cell projection, dendrite. Postsynaptic lipid

rafts..

**Purification** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.





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Polyclonal **Clonality** 

Concentration 1 mg/ml

**Observed band** 

**Human Gene ID** 815/816/817

**Human Swiss-Prot Number** Q9UQM7/Q13554/Q13557

Alternative Names

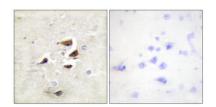
CAMK2A; CAMKA; KIAA0968; Calcium/calmodulin-dependent protein kinase type II subunit alpha; CaM kinase II subunit alpha; CaMK-II subunit alpha; CAMK2B; CAMK2; CAMK2; CAMKB; Calcium/calmodulin-

dependent protein kinase type II subunit beta; Ca

**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 CaMindependent activity. Two transcript variants encoding distinct isoforms have

been identified for this gene. [provided by RefSeq, Nov 2008],



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.