ELK Biotechnology

# CaMKIIα/β/δ rabbit pAb

## Cat No.:ES7641

**For research use only**

**Overview**

| | |
|---|---|
| **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 CaMKIIα/β/δ 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. |
| **Clonality** | Polyclonal |
| **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; |

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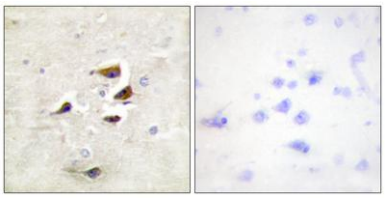
CaMK-II subunit alpha; CAMK2B; CAM2; CAMK2; CAMKB; Calcium/calmodulin-dependent protein kinase type II subunit beta; Ca

**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 CaM-independent 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.

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