

CaMKII α / β / δ (phospho Thr305) rabbit pAb**Cat#: orb764290 (Manual)**

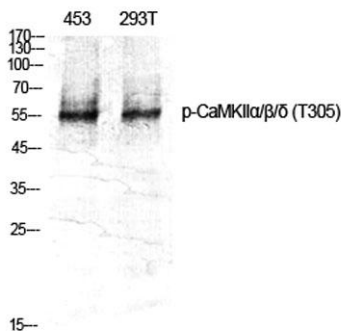
For research use only. Not intended for diagnostic use.

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| Product Name | CaMKII α / β / δ (phospho Thr305) rabbit pAb |
| Host species | Rabbit |
| Applications | WB;IHC;IF;ELISA |
| Species Cross-Reactivity | Human;Mouse;Rat |
| Recommended dilutions | Western Blot: 1/500 - 1/2000. 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 around the phosphorylation site of Thr305. AA range:271-320 |
| Specificity | Phospho-CaMKII α / β / δ (T305) Polyclonal Antibody detects endogenous levels of CaMKII α / β / δ protein only when phosphorylated at T305. |
| 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. |

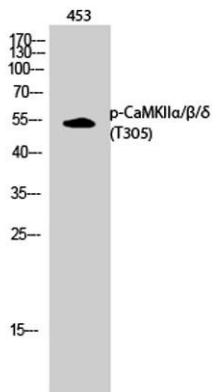
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| Clonality | Polyclonal |
| Concentration | 1 mg/ml |
| Observed band | 54kD |
| Human Gene ID | 816/817 |
| Human Swiss-Prot Number | Q9UQM7/Q13554/Q13557 |
| Alternative Names | CAMK2A; CAMKA; KIAA0968; Calcium/calmodulin-dependent protein kinase type II subunit alpha; CaM kinase II subunit alpha; CaMK-II subunit alpha; CAMK2B; CAM2; CAMK2; CAMKB; Calcium/calmodulin-dependent protein kinase type II subunit beta; Ca |

Background

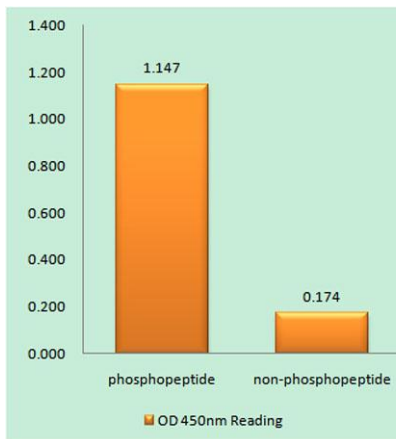
The product of this gene belongs to the serine/threonine protein kinases family, and to the Ca(2+)/calmodulin-dependent protein kinases subfamily. Calcium signaling is crucial for several aspects of plasticity at glutamatergic synapses. This calcium calmodulin-dependent protein kinase is composed of 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],



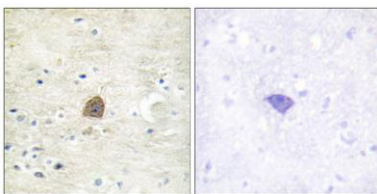
Western Blot analysis of various cells using Phospho-CaMKIIα/β/δ (T305) Polyclonal Antibody diluted at 1:1000



Western Blot analysis of 453 cells using Phospho-CaMKII α / β / δ (T305) Polyclonal Antibody diluted at 1:1000



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using CaMK2 alpha/beta/delta (Phospho-Thr305) Antibody



Immunohistochemistry analysis of paraffin-embedded human brain, using CaMK2 alpha/beta/delta (Phospho-Thr305) Antibody. The picture on the right is blocked with the phospho peptide.