



CaMKII α / β / δ (phospho Thr305) rabbit pAb

Cat No.:ES1415

For research use only

Overview

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.
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;

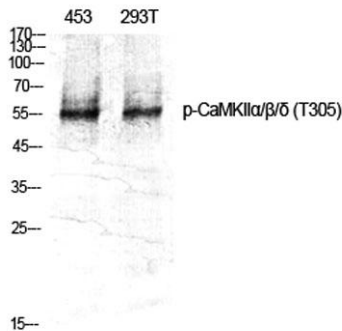




Background

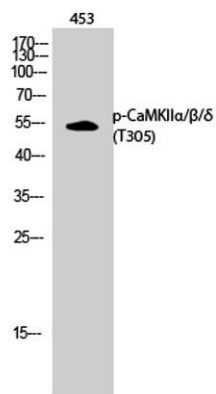
Calcium/calmodulin-dependent protein kinase type II subunit alpha; CaM kinase II subunit alpha; CaMK-II subunit alpha; CAMK2B; CAM2; CAMK2; CAMKB; Calcium/calmodulin-dependent protein kinase type II subunit beta; Ca

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],

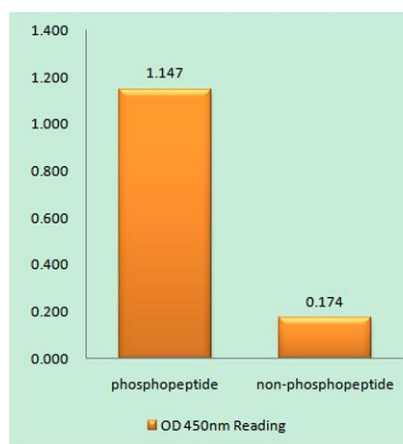


Western Blot analysis of various cells using Phospho-CaMKIIα/β/δ (T305) Polyclonal Antibody diluted at 1:1000

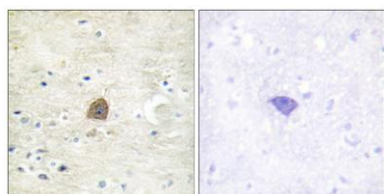




Western Blot analysis of 453 cells using Phospho-CaMKIIα/β/δ (T305) Polyclonal Antibody diluted at 1:1000



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.

