

**CaMK2 (Phospho Thr286) Antibody**

<b>Catalog No :</b>	YP1249
<b>Reactivity :</b>	Human;Mouse;Rat
<b>Applications :</b>	WB;ELISA
<b>Target :</b>	CaMK2
<b>Fields :</b>	>>ErbB signaling pathway;>>Calcium signaling pathway;>>cAMP signaling pathway;>>HIF-1 signaling pathway;>>Oocyte meiosis;>>Necroptosis;>>Adrenergic signaling in cardiomyocytes;>>Wnt signaling pathway;>>Axon guidance;>>Circadian entrainment;>>Long-term potentiation;>>Neurotrophin signaling pathway;>>Cholinergic synapse;>>Dopaminergic synapse;>>Olfactory transduction;>>Inflammatory mediator regulation of TRP channels;>>Insulin secretion;>>GnRH signaling pathway;>>Melanogenesis;>>Oxytocin signaling pathway;>>Glucagon signaling pathway;>>Aldosterone synthesis and secretion;>>Cushing syndrome;>>Gastric acid secretion;>>Parkinson disease;>>Pathways of neurodegeneration - multiple diseases;>>Amphetamine addiction;>>Tuberculosis;>>Pathways in cancer;>>Proteoglycans in cancer;>>Glioma;>>Diabetic cardiomyopathy;>>Lipid and atherosclerosis
<b>Gene Name :</b>	CAMK2D CAMKD
<b>Protein Name :</b>	CaMK2 (Phospho-Thr286)
<b>Human Gene Id :</b>	817
<b>Human Swiss Prot No :</b>	Q9UQM7/Q13557
<b>Immunogen :</b>	Synthesized pospho peptide derived from human CaMK2 (Phospho-Thr286)
<b>Specificity :</b>	This antibody detects endogenous pospho levels of human CaMK2 (Phospho-Thr286)
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Polyclonal, Rabbit,IgG

**Dilution :** WB 1:500-2000, ELISA(peptide)1:5000-20000

**Purification :** The antibody was affinity-purified from mouse ascites by affinity-chromatography using specific immunogen.

**Concentration :** 1 mg/ml

**Storage Stability :** -15°C to -25°C/1 year(Do not lower than -25°C)

**Observed Band :** 54kD

**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],

**Function :** 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

**Subcellular Location :** Cell junction, synapse . Cell junction, synapse, postsynaptic density . Cell projection, dendritic spine . Cell projection, dendrite . Postsynaptic lipid rafts. .

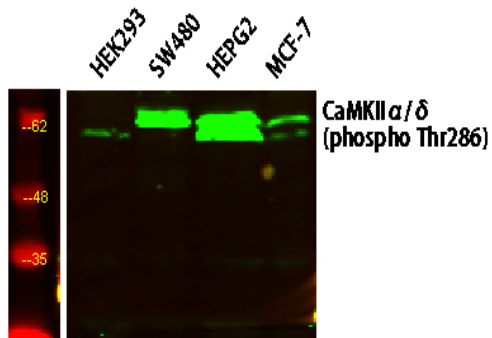
**Expression :** Brain,

**Sort :** 3089

**No4 :** 1

**Host :** Rabbit

## Products Images



Western blot analysis of various lysates, primary antibody was diluted at 1:1000, 4° over night, secondary antibody(cat: RS23920)was diluted at 1:10000, 37° 1hour.