

CaMK2 (Phospho Thr286) Antibody

Catalog No: YP1249

Reactivity: Human; Mouse; Rat

Applications: WB;ELISA

Target: CaMK2

Fields: >>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;>>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

Gene Name: CAMK2D CAMKD

Protein Name: CaMK2 (Phospho-Thr286)

Human Gene Id: 817

Human Swiss Prot

Q9UQM7/Q13557

No:

Immunogen: Synthesized pospho peptide derived from human CaMK2 (Phospho-Thr286)

Specificity: This antibody detects endogenous pospho levels of human CaMK2 (Phospho-

Thr286)

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: 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.

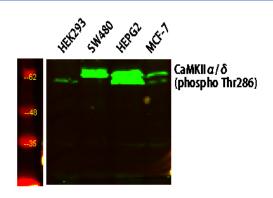
Expression: Brain,

Sort: 3089

No4: 1



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.