



# CaMK2 (Phospho-Thr286) Antibody

<b>Catalog No</b>	BYmab-14582
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human; Mouse; Rat
<b>Applications</b>	WB
<b>Gene Name</b>	CAMK2D CAMKD
<b>Protein Name</b>	CaMK2 (Phospho-Thr286)
<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>	Monoclonal, Mouse,IgG
<b>Purification</b>	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	WB 1:500-2000
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	Calcium/calmodulin-dependent protein kinase type II subunit delta (CaM kinase II subunit delta;CaMK-II subunit delta;EC 2.7.11.17)
<b>Observed Band</b>	54kD
<b>Cell Pathway</b>	Cell junction, synapse . Cell junction, synapse, postsynaptic density . Cell projection, dendritic spine . Cell projection, dendrite . Postsynaptic lipid rafts. .
<b>Tissue Specificity</b>	Brain,
<b>Function</b>	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

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isoforms assemble into homo- or heteromultimeric

### 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],

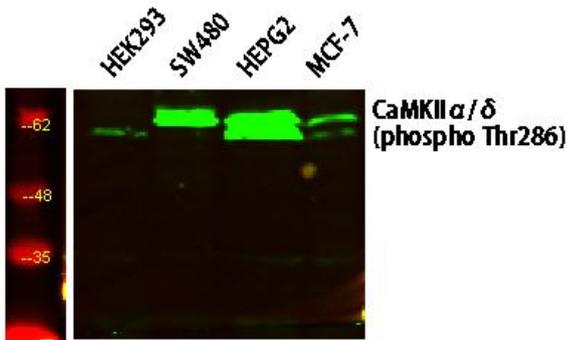
### matters needing attention

Avoid repeated freezing and thawing!

### Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

## Products Images



Western Blot analysis of various cells using CaMK2 (Phospho-Thr286) Antibody