

**Product Name: CaMKII $\beta$ / $\gamma$ / $\delta$ (Phospho Thr287)  
(4H2)Mouse Monoclonal Antibody  
Catalog #: AMM05676**

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## Summary

<b>Production Name</b>	CaMKII $\beta$ / $\gamma$ / $\delta$ (Phospho Thr287)(4H2)Mouse Monoclonal Antibody
<b>Description</b>	Mouse Monoclonal Antibody
<b>Host</b>	Mouse
<b>Application</b>	IHC
<b>Reactivity</b>	Human,Rat,Mouse

## Performance

<b>Conjugation</b>	Unconjugated
<b>Modification</b>	Phospho Antibody
<b>Isotype</b>	IgG
<b>Clonality</b>	Monoclonal
<b>Form</b>	Liquid
<b>Storage</b>	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
<b>Buffer</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
<b>Purification</b>	Affinity purification

## Immunogen

<b>Gene Name</b>	CAMK2B; CAM2; CAMK2; CAMKB; Calcium/calmodulin-dependent protein kinase type II subunit beta; CaM kinase II subunit beta; CaMK-II subunit beta; CAMK2G; CAMK; CAMK-II; CAMKG; Calcium/calmodulin-dependent protein kinase type II subunit gamma;
<b>Alternative Names</b>	
<b>Gene ID</b>	816/817/818
<b>SwissProt ID</b>	Q13554/Q13555/Q13557.Synthetic Peptide of CaMKII $\beta$ / $\gamma$ / $\delta$ (Phospho Thr287)

## Application

<b>Dilution Ratio</b>	IHC 1:100-200
<b>Molecular Weight</b>	50kD

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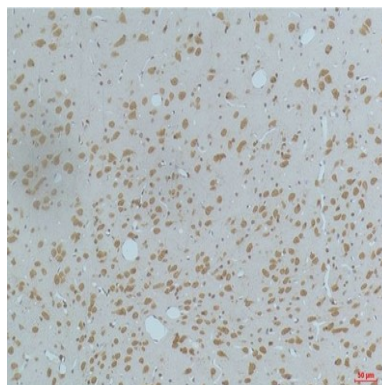
## Background

The product of this gene belongs to the serine/threonine protein kinase family and to the Ca(2+)/calmodulin-dependent protein kinase subfamily. Calcium signaling is crucial for several aspects of plasticity at glutamatergic synapses. In mammalian cells, the enzyme is composed of four different chains: alpha, beta, gamma, and delta. The product of this gene is a beta chain. It is possible that distinct isoforms of this chain have different cellular localizations and interact differently with calmodulin. Alternative splicing results in multiple transcript variants. [provided by RefSeq, May 2014], alternative products: The variable region of the CAMK2B protein is encoded by at least 7 exons (V1 to V7). Alternative splicing within this region gives rise to CAMK2B isoforms, catalytic activity: ATP + a protein = ADP + a phosphoprotein., enzyme regulation: Autophosphorylation of CAMK2 plays an important role in the regulation of the kinase activity., 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., subunit: CAMK2 is composed of four different chains: alpha, beta, gamma, and delta. The different isoforms assemble into homo- or heteromultimeric holoenzymes composed of 8 to 12 subunits. Interacts with SYNGAP1 and CAMK2N2 (By similarity). Interacts with MPDZ., tissue specificity: Widely expressed. Expressed in adult and fetal brain. Expression is slightly lower in fetal brain.,

## Research Area

ErbB\_HER; Calcium; Oocyte meiosis; WNT; WNT-T CELL Long-term potentiation; Neurotrophin; Olfactory transduction; GnRH; Melanogenesis; Glioma;

## Image Data



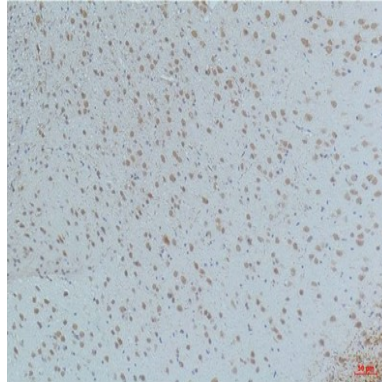
Immunohistochemical analysis of paraffin-embedded Rat Brain Tissue using CaMKII $\beta$ / $\gamma$ / $\delta$  (Phospho Thr287) (mAb)

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diluted at 1:200.



Immunohistochemical analysis of paraffin-embedded Mouse Brain Tissue using CaMKII $\beta$ / $\gamma$ / $\delta$  (Phospho Thr287) Mouse mAb diluted at 1:200.

**Note**

For research use only.