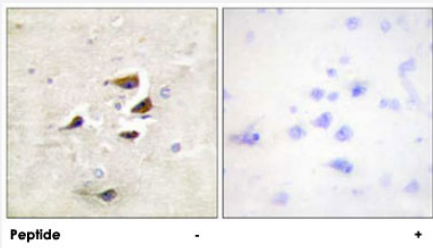


CAMK2A/CAMK2B/CAMK2D polyclonal antibody

Catalog # PAB18090

Size 100 ug

Applications



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical analysis of paraffin-embedded human brain tissue using CAMK2A/CAMK2B/CAMK2D polyclonal antibody (Cat # PAB18090).
Peptide "+" means "peptide blocking".

Specification

Product Description Rabbit polyclonal antibody raised against synthetic peptide of CAMK2A/CAMK2B/CAMK2D.

Immunogen A synthetic peptide corresponding to human CAMK2A/CAMK2B/CAMK2D.

Host Rabbit

Reactivity Human, Mouse, Rat

Specificity This antibody is specific to CAMK2A/CAMK2B/CAMK2D.

Form Liquid

Purification Affinity purification

Concentration 1 mg/mL

Recommend Usage
Immunohistochemistry (1:50-1:100)
ELISA (1:40000)
The optimal working dilution should be determined by the end user.

Storage Buffer In PBS, 150mM NaCl, pH 7.4 (50% glycerol, 0.02% sodium azide)

Storage Instruction

Store at -20°C.
Aliquot to avoid repeated freezing and thawing.

Note

This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical analysis of paraffin-embedded human brain tissue using CAMK2A/CAMK2B/CAMK2D polyclonal antibody (Cat # PAB18090).
Peptide "+" means "peptide blocking".

- Enzyme-linked Immunoabsorbent Assay

Gene Info — CAMK2A

Entrez GeneID[815](#)**Gene Name**

CAMK2A

Gene Alias

CAMKA, KIAA0968

Gene Description

calcium/calmodulin-dependent protein kinase II alpha

Omim ID[114078](#)**Gene Ontology**[Hyperlink](#)**Gene Summary**

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]

Other Designations

CaM kinase II alpha subunit|CaM-kinase II alpha chain|CaMK-II alpha subunit|CaMKIIAlpha|OTTHUMP00000165787|OTTHUMP00000165788|calcium/calmodulin-dependent protein kinase (CaM kinase) II alpha|calcium/calmodulin-dependent protein kinase II alpha-B subunit

Gene Info — CAMK2B

Entrez GeneID	816
Gene Name	CAMK2B
Gene Alias	CAM2, CAMK2, CAMKB, MGC29528
Gene Description	calcium/calmodulin-dependent protein kinase II beta
Omim ID	607707
Gene Ontology	Hyperlink
Gene Summary	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. Eight transcript variants encoding eight distinct isoforms have been identified for this gene. [provided by RefSeq]
Other Designations	CaM kinase II beta subunit CaM-kinase II beta chain CaMK-II beta subunit OTTHUMP00000159355 OTTHUMP00000159356 calcium/calmodulin-dependent protein kinase (CaM kinase) II beta calcium/calmodulin-dependent protein kinase type II beta chain proline rich cal

Gene Info — CAMK2D

Entrez GeneID	817
Gene Name	CAMK2D
Gene Alias	CAMKD, DKFZp686G23119, DKFZp686I2288, MGC44911
Gene Description	calcium/calmodulin-dependent protein kinase II delta
Omim ID	607708
Gene Ontology	Hyperlink
Gene Summary	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 delta chain. Alternative splicing results in multiple transcript variants encoding distinct isoforms. Distinct isoforms of this chain have different expression patterns

Other Designations

CaM kinase II delta subunit|CaM-kinase II delta chain|CaMK-II delta subunit|OTTHUMP00000163829|OTTHUMP00000163830|calcium/calmodulin-dependent protein kinase (CaM kinase) II delta|calcium/calmodulin-dependent protein kinase type II delta chain

Publication Reference

- [SynGAP-MUPP1-CaMKII synaptic complexes regulate p38 MAP kinase activity and NMDA receptor-dependent synaptic AMPA receptor potentiation.](#)

Krapivinsky G, Medina I, Krapivinsky L, Gapon S, Clapham DE.

Neuron 2004 Aug; 43(4):563.

Application: WB, Human, Rat, HEK 293T cells, Rat brains

Pathway

- [Calcium signaling pathway](#)
- [Calcium signaling pathway](#)
- [Calcium signaling pathway](#)
- [ErbB signaling pathway](#)
- [ErbB signaling pathway](#)
- [ErbB signaling pathway](#)
- [Glioma](#)
- [Glioma](#)
- [Glioma](#)
- [GnRH signaling pathway](#)
- [GnRH signaling pathway](#)
- [GnRH signaling pathway](#)
- [Long-term potentiation](#)
- [Long-term potentiation](#)
- [Long-term potentiation](#)
- [Melanogenesis](#)

- [Melanogenesis](#)
- [Melanogenesis](#)
- [Neurotrophin signaling pathway](#)
- [Neurotrophin signaling pathway](#)
- [Neurotrophin signaling pathway](#)
- [Olfactory transduction](#)
- [Olfactory transduction](#)
- [Olfactory transduction](#)
- [Wnt signaling pathway](#)
- [Wnt signaling pathway](#)
- [Wnt signaling pathway](#)

Disease

- [Alcoholism](#)
- [Attention Deficit Disorder with Hyperactivity](#)
- [Autistic Disorder](#)
- [Bipolar Disorder](#)
- [Cognition](#)
- [Cognition](#)
- [Genetic Predisposition to Disease](#)
- [Genetic Predisposition to Disease](#)
- [Mucocutaneous Lymph Node Syndrome](#)
- [NARP](#)
- [Schizophrenia](#)
- [Schizophrenia](#)
- [Schizophrenic Psychology](#)

- [Schizophrenic Psychology](#)
- [Tobacco Use Disorder](#)
- [Tobacco Use Disorder](#)
- [Tobacco Use Disorder](#)
- [Weight Gain](#)
- [Weight Gain](#)