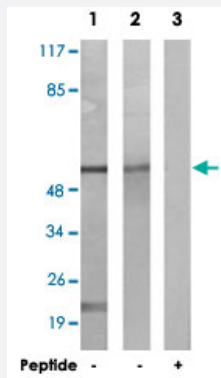


CAMK2A/CAMK2D polyclonal antibody

Catalog # PAB18457 Size 100 ug

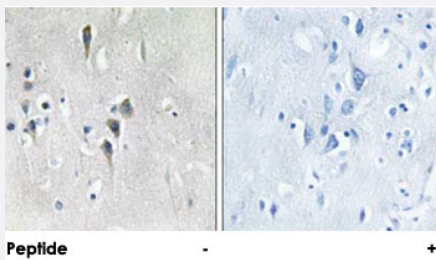
Applications



Western Blot (Cell lysate)

Western blot analysis of extracts from K-562 cells (Lane 1) and NIH/3T3 cells (Lane 2 and 3), using CAMK2A/CAMK2D polyclonal antibody (Cat # PAB18457).

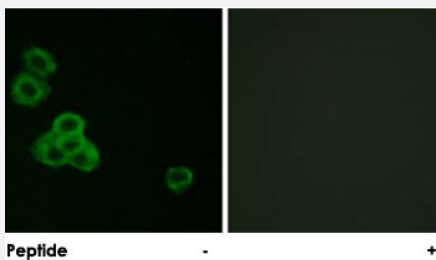
Peptide "+" means "peptide blocking".



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

Immunohistochemical analysis of paraffin-embedded human brain tissue using CAMK2A/CAMK2D polyclonal antibody (Cat # PAB18457).

Peptide "+" means "peptide blocking".



Immunofluorescence

Immunofluorescence analysis of MCF-7 cells, using CAMK2A/CAMK2D polyclonal antibody (Cat # PAB18457).

Peptide "+" means "peptide blocking".

Specification

Product Description

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

Immunogen	A synthetic peptide corresponding to residues surrounding T286 of human CAMK2A/CAMK2D.
Host	Rabbit
Reactivity	Human, Mouse, Rat
Specificity	This antibody is specific to CAMK2A/CAMK2D.
Form	Liquid
Purification	Affinity purification
Concentration	1 mg/mL
Recommend Usage	Western Blot (1:500-1:1000) Immunohistochemistry (1:50-1:100) Immunofluorescence (1:500-1:1000) 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

- Western Blot (Cell lysate)

Western blot analysis of extracts from K-562 cells (Lane 1) and NIH/3T3 cells (Lane 2 and 3), using CAMK2A/CAMK2D polyclonal antibody (Cat # PAB18457).
Peptide "+" means "peptide blocking".

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

Immunohistochemical analysis of paraffin-embedded human brain tissue using CAMK2A/CAMK2D polyclonal antibody (Cat # PAB18457).
Peptide "+" means "peptide blocking".

- Immunofluorescence

Immunofluorescence analysis of MCF-7 cells, using CAMK2A/CAMK2D polyclonal antibody (Cat # PAB18457).
Peptide "+" means "peptide blocking".

- Enzyme-linked Immunoabsorbent Assay

Gene Info — CAMK2A

Entrez GeneID [815](#)**Protein Accession#** [Q9UQM7](#)**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|OTT HUMP00000165787|OTTHUMP00000165788|calcium/calmodulin-dependent protein kinase (CaM kinase) II alpha|calcium/calmodulin-dependent protein kinase II alpha-B subunit

Gene Info — CAMK2D

Entrez GeneID [817](#)**Protein Accession#** [Q9UQM7](#)**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

- [Human vaccinia-related kinase 1 \(VRK1\) activates the ATF2 transcriptional activity by novel phosphorylation on Thr-73 and Ser-62 and cooperates with JNK.](#)

Sevilla A, Santos CR, Vega FM, Lazo PA.

The Journal of Biological Chemistry 2004 Apr; 279(26):27458.

- [p38 mitogen-activated protein kinase is activated and linked to TNF-alpha signaling in inflammatory bowel disease.](#)

Waetzig GH, Seeger D, Rosenstiel P, Nikolaus S, Schreiber S.

The Journal of Immunology 2002 May; 168(10):5342.

Pathway

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

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

Disease

- [Alcoholism](#)
- [Bipolar Disorder](#)
- [Cognition](#)
- [Genetic Predisposition to Disease](#)
- [Genetic Predisposition to Disease](#)
- [Mucocutaneous Lymph Node Syndrome](#)
- [Schizophrenia](#)
- [Schizophrenic Psychology](#)
- [Tobacco Use Disorder](#)
- [Tobacco Use Disorder](#)
- [Weight Gain](#)