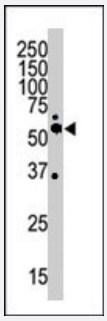
CAMK2A polyclonal antibody

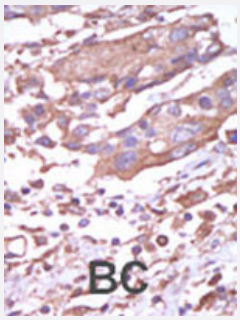
Catalog # PAB2770 Size 400 uL

Applications



Western Blot (Cell lysate)

Western blot analysis of CAMK2A polyclonal antibody (Cat # PAB2770) in HL-60 cell lysate. CAMK2A (arrow) was detected using purified polyclonal antibody. Secondary HRP-anti-rabbit was used for signal visualization with chemiluminescence.



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

Formalin-fixed and paraffin-embedded human cancer tissue reacted with CAMK2A polyclonal antibody (Cat # PAB2770) , which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry ; clinical relevance has not been evaluated. BC = breast carcinoma.

Specification

Product Description	Rabbit polyclonal antibody raised against synthetic peptide of CAMK2A.
Immunogen	A synthetic peptide (conjugated with KLH) corresponding to C-terminus of human CAMK2A.
Host	Rabbit
Reactivity	Human
Form	Liquid
Purification	Protein G purification

Recommend Usage	Western Blot (1:1000) Immunohistochemistry (1:50-100) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.09% sodium azide)
Storage Instruction	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

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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 com posed of four different chains: alpha, beta, gamma, and delta. The alpha chain encoded by this ge ne 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, resul ting in CaM-independent activity. Two transcript variants encoding distinct isoforms have been id entified for this gene. [provided by RefSeq
Other Designations	CaM kinase II alpha subunit|CaM-kinase II alpha chain|CaMK-II alpha subunit|CaMKIINalpha|OTT HUMP00000165787|OTTHUMP00000165788|calcium/calmodulin-dependent protein kinase (Ca M kinase) II alpha|calcium/calmodulin-dependent protein kinase II alpha-B subunit

Publication Reference

- Oncogenic kinase signalling.

  Blume-Jensen P, Hunter T.

  Nature 2001 May; 411(6835):355.

- Phosphoinositide 3-kinase signalling pathways.

  Cantrell DA.

  Journal of Cell Science 2001 Apr; 114(Pt 8):1439.

- The RET proto-oncogene in human cancers.

  Jhiang SM.

  Oncogene 2000 Nov; 19(49):5590.

Pathway

- Calcium signaling pathway
- ErbB signaling pathway
- Glioma
- GnRH signaling pathway
- Long-term potentiation
- Melanogenesis
- Neurotrophin signaling pathway

- Olfactory transduction
- Wnt signaling pathway

Disease

- Bipolar Disorder
- Cognition
- Genetic Predisposition to Disease
- Schizophrenia
- Schizophrenic Psychology
- Tobacco Use Disorder
- Weight Gain