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Mouse Camkk2 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AW5038

Product Information

Application	WB
Primary Accession	Q8C078
Other Accession	NP_663333.1
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	64618
Isotype	Rabbit IgG
Antigen Source	MOUSE

Additional Information

Gene ID	207565
Antigen Region	43-71
Other Names	Camkk2; Kiaa0787; Calcium/calmodulin-dependent protein kinase kinase 2; Calcium/calmodulin-dependent protein kinase kinase beta
Dilution	WB~~1:1000
Target/Specificity	This Mouse Camkk2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 43-71 amino acids from the N-terminal region of mouse Camkk2.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Mouse Camkk2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	Camkk2
Synonyms	Kiaa0787

Function	Calcium/calmodulin-dependent protein kinase belonging to a proposed calcium-triggered signaling cascade involved in a number of cellular processes. Phosphorylates CAMK1, CAMK4 and CAMK1D (By similarity). Efficiently phosphorylates 5'-AMP-activated protein kinase (AMPK) trimer, including that consisting of PRKAA1, PRKAB1 and PRKAG1. This phosphorylation is stimulated in response to Ca(2+) signals (By similarity). May play a role in neurite growth. Isoform 2 may promote neurite elongation, while isoform 1 may promoter neurite branching (By similarity). May be involved in hippocampal activation of CREB1.
Cellular Location	Nucleus {ECO:0000250|UniProtKB:Q96RR4}. Cytoplasm {ECO:0000250|UniProtKB:Q96RR4}. Cell projection, neuron projection {ECO:0000250|UniProtKB:Q96RR4}. Note=Predominantly nuclear in unstimulated cells, relocalizes into cytoplasm and neurites after forskolin induction. {ECO:0000250|UniProtKB:Q96RR4}
Tissue Location	Expressed in all tissues tested. A differential expression pattern compared to CAMKK1 is observed in the brain

Background

Calcium/calmodulin-dependent protein kinase belonging to a proposed calcium-triggered signaling cascade involved in a number of cellular processes. Phosphorylates CAMK1, CAMK4 and CAMK1D (By similarity). Seems to be involved in hippocampal activation of CREB1.

References

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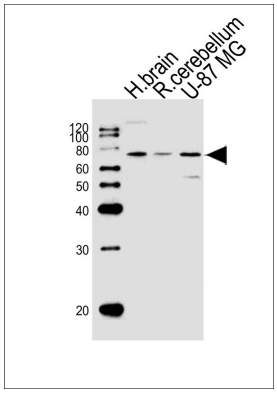
Kokubo, M., et al. J. Neurosci. 29(28):8901-8913(2009)
Anderson, K.A., et al. Cell Metab. 7(5):377-388(2008)
Park, C.S., et al. Neuroscience 151(1):43-55(2008)
Hoyer-Hansen, M., et al. Mol. Cell 25(2):193-205(2007)

Images



Western blot analysis of lysates from human brain,rat cerebellum tissue and U-87 MG cell line (from left to right),using Mouse Camkk2 Antibody (N-term)(Cat. #AW5038). AW5038 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody.