

CaMK2 (Phospho-Thr286) Antibody

Catalog # AP68181

Product Information

Application WB

Primary Accession Q9UQM7, Q13557
Reactivity Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Calculated MW 54088

Additional Information

Gene ID 815

Other Names Calcium/calmodulin-dependent protein kinase type II subunit delta (CaM

kinase II subunit delta) (CaMK-II subunit delta) (EC 2.7.11.17)

Dilution WB~~WB 1:500-2000, ELISA(peptide)1:5000-20000

Format Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium

azide.

Storage Conditions -20°C

Protein Information

Name CAMK2A

Synonyms CAMKA, KIAA0968

Function Calcium/calmodulin-dependent protein kinase that functions autonomously

after Ca(2+)/calmodulin-binding and autophosphorylation, and is involved in various processes, such as synaptic plasticity, neurotransmitter release and long-term potentiation (PubMed:14722083). Member of the NMDAR signaling complex in excitatory synapses, it regulates NMDAR-dependent potentiation of the AMPAR and therefore excitatory synaptic transmission (By similarity). Regulates dendritic spine development (PubMed:28130356). Also regulates the migration of developing neurons (PubMed:29100089). Phosphorylates the

transcription factor FOXO3 to activate its transcriptional activity

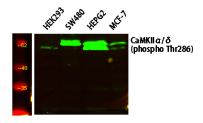
(PubMed: <u>23805378</u>). Phosphorylates the transcription factor ETS1 in response to calcium signaling, thereby decreasing ETS1 affinity for DNA (By similarity). In response to interferon-gamma (IFN-gamma) stimulation, catalyzes phosphorylation of STAT1, stimulating the JAK- STAT signaling pathway (PubMed: <u>11972023</u>). In response to interferon- beta (IFN-beta) stimulation, stimulates the JAK-STAT signaling pathway (PubMed: <u>35568036</u>). Acts as a negative regulator of 2- arachidonoylglycerol (2-AG)-mediated synaptic

signaling via modulation of DAGLA activity (By similarity).

Cellular Location

Synapse {ECO:0000250|UniProtKB:P11275}. Postsynaptic density {ECO:0000250|UniProtKB:P11275}. Cell projection, dendritic spine. Cell projection, dendrite. Note=Postsynaptic lipid rafts {ECO:0000250|UniProtKB:P11275}

Images



Western blot analysis of various lysates, primary antibody was diluted at 1:1000, 4° over night, secondary antibody(cat: RS23920)was diluted at 1:10000, 37° 1hour.

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