

Rabbit Anti-CAMK2A Polyclonal Antibody

CPB-811RH Rabbit(CAMK2A)

Lot. No. (See product label)

PRODUCT INFORMATION

Product Overview	Rabbit Anti-CAMK2A Polyclonal Antibody
Antigen Description	CaM-kinase II (CAMK2) is a prominent kinase in the central nervous system that may function in long-term potentiation and neurotransmitter release. Member of the NMDAR signaling complex in excitatory synapses it may regulate NMDAR-dependent potentiation of the AMPAR and synaptic plasticity.
specificity	The antibody detects endogenous level of CAMK2A only when phosphorylated at threonine 286.
Target	CAMK2A
Immunogen	Peptide sequence around phosphorylation site of threonine 286 (Q-E-T(p)-V-D) derived from Human CAMK2A.
Host	Rabbit
Species	Human
Cross Reactivity	Human, Mouse, Rat
conjugation	N/A
Applications	WB

PACKAGING

Format	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C/ 1year

ANTIGEN GENE INFORMATION

Gene Name	CAMK2A calcium/calmodulin-dependent protein kinase II alpha [Homo sapiens]
Official Symbol	CAMK2A
Synonyms	CAMK2A; calcium/calmodulin-dependent protein kinase II alpha; calcium/calmodulin dependent protein kinase (CaM kinase) II alpha , CAMKA; calcium/calmodulin-dependent protein kinase type II subunit alpha; calcium/calmodulin dependent protein kinase II alpha B subunit; calcium/calmodulin dependent protein kinase type II alpha chain; CaM kinase II alpha subunit; CaM kinase II alpha chain; CaMK II alpha subunit; CaMKIINalpha; KIAA0968; CaMK-II alpha subunit; caMK-II subunit alpha; CaM-kinase II alpha chain; caM kinase II subunit alpha; calcium/calmodulin-dependent protein kinase II alpha-B subunit; calcium/calmodulin-dependent protein kinase type II alpha chain; calcium/calmodulin-dependent protein kinase (CaM kinase) II alpha; CAMKA;
GeneID	815
mRNA Refseq	NM_015981
Protein Refseq	NP_057065
MIM	114078
UniProt ID	Q9UQM7

Chromosome Location 5

Pathway

Activation of NMDA receptor upon glutamate binding and postsynaptic events, organism-specific biosystem; Amphetamine addiction, organism-specific biosystem; Amphetamine addiction, conserved biosystem; CREB phosphorylation through the activation of CaMKII, organism-specific biosystem; CREB phosphorylation through the activation of Ras, organism-specific biosystem; Calcium Regulation in the Cardiac Cell, organism-specific biosystem; Calcium signaling pathway, organism-specific biosystem;

Function

ATP binding; calmodulin binding; calmodulin-dependent protein kinase activity; kinase activity; nucleotide binding; protein binding;