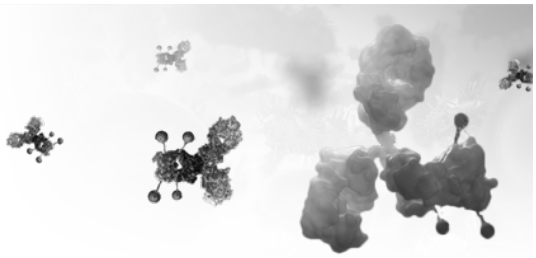

CAMK2A (phospho T286) peptide (DAG-P1324)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Antigen Description	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, Nov 2008]
Purity	70 - 90% by HPLC.
Conjugate	Unconjugated
Sequence Similarities	Belongs to the protein kinase superfamily. CAMK Ser/Thr protein kinase family. CaMK subfamily.Contains 1 protein kinase domain.
Format	Liquid
Preservative	None
Storage	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. Information available upon request.

GENE INFORMATION

Gene Name	CAMK2A calcium/calmodulin-dependent protein kinase II alpha [Homo sapiens (human)]
Official Symbol	CAMK2A
Synonyms	CAMK2A; calcium/calmodulin-dependent protein kinase II alpha; CAMKA; calcium/calmodulin-dependent protein kinase type II subunit alpha; CaMKIINalpha; CaMK-II alpha subunit; caMK-II

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	subunit alpha; CaM-kinase II alpha chain; CaM kinase II alpha subunit; 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;
Entrez Gene ID	815
mRNA Refseq	NM_015981.3
Protein Refseq	NP_057065.2
UniProt ID	A8K161
Chromosome Location	5q32
Pathway	Activation of NMDA receptor upon glutamate binding and postsynaptic events, organism-specific biosystem; Adrenergic signaling in cardiomyocytes, organism-specific biosystem; Adrenergic signaling in cardiomyocytes, conserved biosystem; Amphetamine addiction, organism-specific biosystem; Amphetamine addiction, conserved biosystem; BDNF signaling pathway, organism-specific biosystem; CREB phosphorylation through the activation of CaMKII, organism-specific biosystem; CREB phosphorylation through the
Function	ATP binding; calmodulin binding; calmodulin-dependent protein kinase activity; glutamate receptor binding; kinase activity; protein binding;

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