Recombinant Human CAMK2A, GST-tagged, Active

Cat. No. CAMK2A-264H **Lot. No.** (See product label)

SPECIFICATION

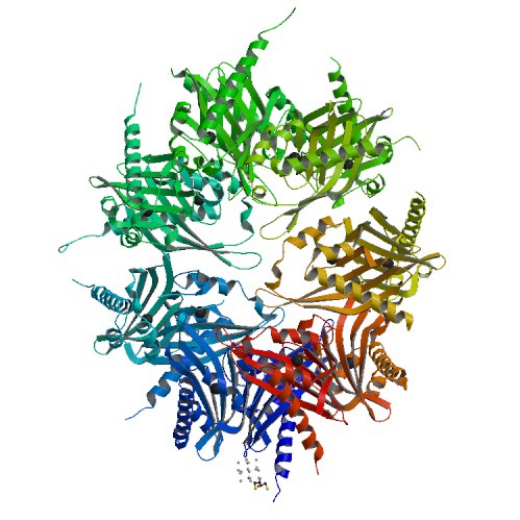
Product Overview	Recombinant full-length human CAMK2alpha was expressed in*Sf9*cells using an N-terminal GST tag. MW = 74 kDa.
Species	Human
Source	Sf9 Cells
Description	CAMK2α is a ser/thr protein kinase that is a member of the Ca2+/calmodulin-dependent protein kinase family. CAMK2α is abundant in the brain as a major constituent of the postsynaptic density and is required for hippocampal long-term potentiation (LTP) and spatial learning. In addition to its Ca2+/calmodulin-dependent activity, CAMK2α can undergo autophosphorylation, resulting in Ca2+/calmodulin-independent activity. The protein level of CAMK2α fluctuates during neuronal activity in cultured rat pup hippocampal neurons. The levels of CAMK2α increased with heightened neuronal activity.
Sequence	Full-length.
Applications	Kinase Assay, Western Blot.
Storage And Stability	Store product at -70°C. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles.

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

GENE INFORMATION

Gene Name	CAMK2A calcium/calmodulin-dependent protein kinase II alpha [Homo sapiens]
Synonyms	CAMK2A; calcium/calmodulin-dependent protein kinase II alpha; CAMKA; KIAA0968; CaMKIINalpha; CaMK-II alpha subunitCaM-kinase II alpha chain; CaM kinase II alpha subunit; 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; EC 2.7.11.17; OTTHUMP00000165787; OTTHUMP00000165788; CaM kinase II subunit alpha; CaMK-II alpha subunit; CaMK-II subunit alpha; calcium/calmodulin-dependent protein kinase II alpha
Gene ID	815
mRNA Refseq	NM_015981
Protein Refseq	NP_057065
MIM	114078
UniProt ID	Q9UQM7
Chromosome Location	5q32
Pathway	Calcium signaling pathway; ErbB signaling pathway; Glioma; GnRH signaling pathway; Long-term potentiation; Melanogenesis; Neurotrophin signaling pathway; Olfactory transduction; Wnt signaling pathway
Function	ATP binding; calmodulin binding; calmodulin-dependent protein kinase activity;

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

	nucleotide binding; transferase activity
PDB rendering based on 1hkx.	

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA