

Active Recombinant Full Length Human CAMK2A Protein, C-Flag-tagged

Cat. No. CAMK2A-508HFL **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Full Length Human CAMK2A Protein, fused to Flag-tag at C-terminus, was expressed in Mammalian cells.
Species	Human
Source	Mammalian Cells
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. Several transcript variants encoding distinct isoforms have been identified for this gene.
Form	25 mM Tris HCl, pH 7.3, 100 mM glycine, 10% glycerol.
Bio-activity	Enzyme activity regulator
Molecular Mass	55.1 kDa
AA Sequence	MATITCTRFTEEYQLFEELGKGAFSVVRRRCVKVLAGQEYAAKIINTKKLSARDHQKLE

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REARICRLLKHP NIVRLHDSISEEGHHYLIFDLVTGGELFEDIVAREYYSEADASHCIQ
 QILEAVLHCHQMGGVHRDLKPEN LLLASKLKGAAVKLADFGLAIEVEGEQQAWFGF
 AGTPGYLSPEVLRKDPYGKPVLDWACGVILYILLVGY PPFWDEDQHRLYQQIKAGA
 YDFPSPEWDTVTPEAKDLINKMLTINPSKRITAAEALKHPWISHRSTVASC MHRQET
 VDCLKKFNARRKLLKGAILTTMLATRNFSGGKSGGNKKSDBGVKKRKSSESSVQLMESS
 ESTNTTIE DEDTKVRKQEIIKVTEQLIEAISNGDFESYTKMCDPGMTAFEPEALGNLV
 EGLDFHRFYFENLWSRNSKP VHTTILNPHIHLMGDESACIAYIRITQYLDAGGIPRTA
 QSEETRVWHRRDGKWQIVHFHRSGAPSVLPHTRTRPLEQKLISEEDLAANDILDYK
 DDDDKV

Purity > 80% as determined by SDS-PAGE and Coomassie blue staining.

Stability Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.

Storage Store at -80 centigrade.

Concentration >50 ug/mL as determined by microplate BCA method.

Preparation Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.

Protein Families Druggable Genome, Protein Kinase

Protein Pathways Calcium signaling pathway, ErbB signaling pathway, Glioma, GnRH signaling pathway, Long-term potentiation, Melanogenesis, Neurotrophin signaling pathway, Olfactory transduction, Oocyte meiosis, Wnt signaling pathway

Full Length Full L.

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GENE INFORMATION

Gene Name CAMK2A calcium/calmodulin dependent protein kinase II alpha [Homo sapiens (human)]

Official Symbol CAMK2A

Synonyms CAMKA; MRD53; MRT63; CaMKIIalpha; CaMKIINalpha

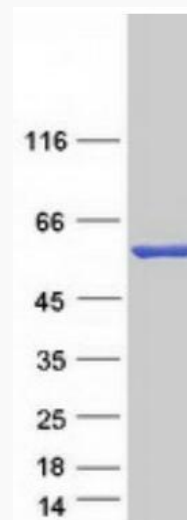
Gene ID 815

mRNA Refseq NM_015981.4

Protein Refseq NP_057065.2

MIM 114078

UniProt ID Q8IWE0



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Coomassie blue staining of purified CAMK2A protein.

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