

Product datasheet for PH318186

CAMK2A (NM_015981) Human Mass Spec Standard

Product data:

Product Type:	Mass Spec Standards
Description:	CAMK2A MS Standard C13 and N15-labeled recombinant protein (NP_057065)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC218186
Predicted MW:	55.1 kDa
Protein Sequence:	>RC218186 representing NM_015981 Red=Cloning site Green=Tags(s)

MATITCTRFTEEYQLFEELGKGAFSVVRRVCVKVLAGQEYAAKIINTKKLSARDHQKLEREARICRLKHP
NIVRLHDSISEEGHLYLIFDLVTGGELFEDIVAREYYSEADASHCIQQILEAVLHCHQMGVVHRDLKPEN
LLLASKLKGAAVKLADFLAIEVEGEQQAWFGFAGTPGYLSPEVLRKDPYKPVLDWACGVILYILLVGY
PPFWDQHRLYQQIKAGAYDFPSPEWDTVTPEAKDLINKMLTINPSKRITAAEALKHPWISHRSTVASC
MHRQETVDCLKKFNARRKLGAILTTMLATRNFSGGKSGGNKSDGVKKRKSSESSVQLMESSESTNTTIE
DEDTKVRKQEIIVTEQLIEAISNGDFESYTKMCDPGMTAFEPEALGNLVEGLDFHRFYFENLWSRNSKP
VHTTILNPHIHLMGDESACIAYIRITQYLDAGGIPRTAQSEETRVWHRRDGKWQIVHFHRSGAPSVLPH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- ¹³ C ₆ , ¹⁵ N ₄]-L-Arginine and [U- ¹³ C ₆ , ¹⁵ N ₂]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	<u>NP_057065</u>
RefSeq Size:	4836
RefSeq ORF:	1467
Synonyms:	CAMKA; CaMKIIalpha; CaMKIINalpha; MRD53; MRT63



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Locus ID: 815

UniProt ID: [A8K161](#), [Q8IWE0](#)

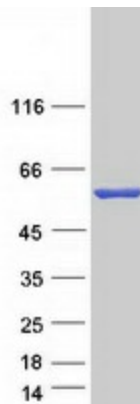
Cytogenetics: 5q32

Summary: 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. [provided by RefSeq, Jun 2018]

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

Product images:



Coomassie blue staining of purified CAMK2A protein (Cat# [TP318186]). The protein was produced from HEK293T cells transfected with CAMK2A cDNA clone (Cat# [RC218186]) using MegaTran 2.0 (Cat# [TT210002]).