

Product datasheet for PH305202

CAMK2A (NM_171825) Human Mass Spec Standard

Product data:

Product Type:	Mass Spec Standards
Description:	CAMK2A MS Standard C13 and N15-labeled recombinant protein (NP_741960)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC205202
Predicted MW:	54.1 kDa
Protein Sequence:	>RC205202 protein sequence Red=Cloning site Green=Tags(s)

MATITCTRFTEEYQLFEELGKGAFSVVRRVCVKVLAGQEYAAKIINTKKLSARDHQKLEREARICRLKHP
NIVRLHDSISEEGHLYLIFDLVTGGELFEDIVAREYYSEADASHCIQQILEAVLHCHQMGGVHRDLKPEN
LLLASKLKGAAVKLADFLAIEVEGEQQAWFGFAGTPGYLSPEVLRKDPYKPVLDWACGVILYILLVGY
PPFWEDEDQHRLYKQIKAGAYDFPSPEWDTVTPEAKDLINKMLTINPSKRITAAEALKHPWISHRSTVASC
MHRQETVDCLKKFNARRKLGAILTTMLATRNFSGGKSGGNKSDGVKESSESTNTTIEDEDTKVRKQEI
IKVTEQLIEAISNGDFESYTKMCDPGMTAFEPEALGNLVEGLDFHRFYFENLWSRNSKPVHTTILNPHIH
LMGDESACIAYIRITQYLDAGGIPRTAQSEETRVWHRRDGKWQIVHFHRSGAPSVLPH

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_741960</u>
RefSeq Size:	4885
RefSeq ORF:	1434
Synonyms:	CAMKA; CaMKIIalpha; CaMKIINalpha; MRD53; MRT63



[View online »](#)

Locus ID: 815

UniProt ID: [Q9UQM7](#), [Q7LDD5](#), [A8K161](#), [Q8IWE0](#)

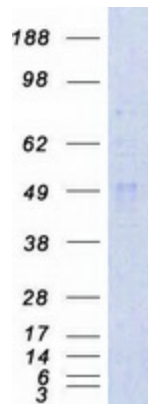
Cytogenetics: 5q32

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# [TP305202]). The protein was produced from HEK293T cells transfected with CAMK2A cDNA clone (Cat# [RC205202]) using MegaTran 2.0 (Cat# [TT210002]).