

## Product datasheet for TP305202L

### CAMK2A (NM\_171825) Human Recombinant Protein

#### Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human calcium/calmodulin-dependent protein kinase II alpha (CAMK2A), transcript variant 2, 1 mg
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>RC205202 protein sequence Red=Cloning site Green=Tags(s)

MATITCTRFTEEYQLFEELGKGAFSVMRRVCVKVLAGQEYAAKIINTKKLSARDHQKLEREARICRLLKHP  
NIVRLHDSISEEGHHYLIFDLVTGGELFEDIVAREYYSEADASHCIQQILEAVLHCHQMGVVHRDLKPN  
LLLASKLKGAAVKLADFGLAIEVEGEQQAWFGFAGTPGYLSPEVLRKDPYGKPVLDWACGVILYILLVGY  
PPFWDEDQHRLYKQIKAGAYDFPSPEWDTVTPEAKDLINKMLTINPSKRITAAEALKHPWISHRSTVASC  
MHRQETVDCLKKFNARRKLGAILTTMLATRNFSGGKSGGNKKSDBGVKESESTNTTIEDEDTKVRKQEI  
IKVTEQLIEAISNGDFESYTKMCDPGMTAFEPEALGNLVEGLDFHRFYFENLWSRNSKPVHTTILNPHIH  
LMGDESACIAYIRITQYLDAGGIPRTAQSEETRVWHRRDGGKWQIVHFHRSRGAPSVLPH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
Predicted MW:	53.9 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Preparation:	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.



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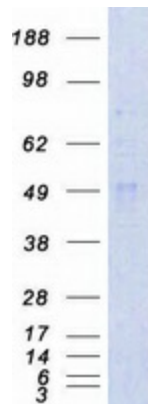
RefSeq:	<a href="#">NP_741960</a>
Locus ID:	815
UniProt ID:	<a href="#">Q9UQM7</a> , <a href="#">Q7LDD5</a> , <a href="#">A8K161</a> , <a href="#">Q8IWE0</a>
RefSeq Size:	4885
Cytogenetics:	5q32
RefSeq ORF:	1434
Synonyms:	CAMKA; CaMKIIalpha; CaMKIINalpha; MRD53; MRT63

**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]).