

Product datasheet for TP318186

CAMK2A (NM_015981) Human Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human calcium/calmodulin-dependent protein kinase II alpha (CAMK2A), transcript variant 1
Species:	Human
Expression Host:	HEK293T
Tag:	C-Myc/DDK
Predicted MW:	55.1 kDa
Concentration:	>50 ug/mL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris.HCl, pH 7.3, 100 mM glycine, 10% glycerol
Bioactivity:	Enzyme activity regulator (PMID: 29486595)
Preparation:	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
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.
RefSeq:	NP_057065
Locus ID:	815
RefSeq Size:	4836
Cytogenetics:	5q32
RefSeq ORF:	1467
Synonyms:	CAMKA; CaMKIINalpha; MRD53; MRT63



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Summary:

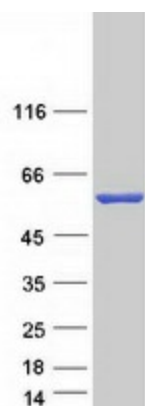
The product of this gene belongs to the serine/threonine protein kinases family, and to the Ca(2+)/calmodulin-dependent protein kinases subfamily. Calcium signaling is crucial for several aspects of plasticity at glutamatergic synapses. This calcium calmodulin-dependent protein kinase is composed of 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]).