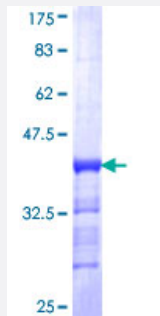


CAMK2A (Human) Recombinant Protein (Q01)

Catalog # H00000815-Q01

Size 25 ug, 10 ug

Applications



Specification

Product Description	Human CAMK2A partial ORF (AAH40457, 305 a.a. - 410 a.a.) recombinant protein with GST-tag at N-terminal.
Sequence	TTMLATRNFSGGKSGGNKKSDGVKESSESTNTTIEDEDTKVRKQEIKVTEQLIEAISNGDFESYTK MCDPGMTAFEPEALGNLVEGLDFHRFYFENLWSRNSKPV
Host	Wheat Germ (in vitro)
Theoretical MW (kDa)	37.29
Preparation Method	in vitro wheat germ expression system
Purification	Glutathione Sepharose 4 Fast Flow
Quality Control Testing	12.5% SDS-PAGE Stained with Coomassie Blue.
Storage Buffer	50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Best use within three months from the date of receipt of this protein.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — CAMK2A

Entrez GeneID [815](#)

GeneBank Accession# [BC040457](#)

Protein Accession# [AAH40457](#)

Gene Name CAMK2A

Gene Alias CAMKA, KIAA0968

Gene Description calcium/calmodulin-dependent protein kinase II alpha

Omim ID [114078](#)

Gene Ontology [Hyperlink](#)

Gene 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. Two transcript variants encoding distinct isoforms have been identified for this gene. [provided by RefSeq]

Other Designations CaM kinase II alpha subunit|CaM-kinase II alpha chain|CaMK-II alpha subunit|CaMKIIalpha|OTTHUMP00000165787|OTTHUMP00000165788|calcium/calmodulin-dependent protein kinase (CaM kinase) II alpha|calcium/calmodulin-dependent protein kinase II alpha-B subunit

Pathway

- [Calcium signaling pathway](#)

- [ErbB signaling pathway](#)
- [Glioma](#)
- [GnRH signaling pathway](#)
- [Long-term potentiation](#)
- [Melanogenesis](#)
- [Neurotrophin signaling pathway](#)
- [Olfactory transduction](#)
- [Wnt signaling pathway](#)

Disease

- [Bipolar Disorder](#)
- [Cognition](#)
- [Genetic Predisposition to Disease](#)
- [Schizophrenia](#)
- [Schizophrenic Psychology](#)
- [Tobacco Use Disorder](#)
- [Weight Gain](#)