

CAMK2 alpha Recombinant Protein | CAMK2alpha recombinant protein

CAMK2 alpha, Active

CATALOG # AAA73306	HOST Sf9 insect cells	APPLICATIONS Western Blot
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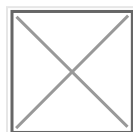
PRODUCT SYNONYMS

CAMK2 alpha; Active; CAMKA; KIAA0968; CAMK2alpha recombinant protein

PRODUCT SPECIFICATIONS

Host	Sf9 insect cells
Form/Format	Recombinant protein stored in 50mM Tris-HCl, pH7.5, 150mM NaCl, 0.25mM DTT, 0.1mM EGTA, 0.1mM EDTA, 0.1mM PMSF, 25% glycerol.
Applicable Applications for CAMK2alpha recombinant protein	WB (Western Blot), Kinase Assay
Tag	GST
Species	Human
Dry Ice Note	The product may be shipped with dry ice, and an additional fee may be added to your shipping cost.
Preparation and Storage	Store product at -70 degree C. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles.

IMAGES



SDS-PAGE

The purity of Camk2&alpha; was determined to be >85% by densitometry. Approx. MW 74kDa



Activity

The specific activity of CAMK2&alpha; was determined to be 294 nmol /min/mg as per activity assay protocol.

ADDITIONAL INFORMATION

Related Product Information for CAMK2alpha recombinant protein	Recombinant full-length human CAMK2alpha was expressed by baculovirus in Sf9 insect cells using an N-terminal GST tag. The gene accession number is NM_171825. CAMK2alpha is a ser/thr protein kinase that is a member of the Ca2+/calmodulin-dependent protein kinase family. CAMK2alpha is abundant in the brain as a major constituent of the postsynaptic density and is required for hippocampal long-term potentiation (LTP) and spatial learning. In addition to its Ca2+/calmodulin-dependent activity, CAMK2alpha can undergo autophosphorylation, resulting in Ca2+/calmodulin-independent activity. The protein level of CAMK2alpha fluctuates during neuronal activity in cultured rat pup hippocampal neurons. The levels of CAMK2alpha increased with heightened neuronal activity (2).
Product Categories/Family for CAMK2alpha recombinant protein	Protein Kinases ; Cardiovascular Disease ; ERK/MAPK Pathway ; Neurobiology ; PKA/PKC Pathway ; Ser/Thr Kinases
References	- Silva, A J. et al: Impaired spatial learning in alpha-calcium calmodulin kinase II mutant mice. Science 257: 206-211, 1992. - Thiagarajan, T C. et al: Alpha-and beta-CaMKII: inverse regulation by neuronal activity and opposing effects on synaptic strength. Neuron 36: 1103-1114, 2002.

NCBI AND UNIPROT INFORMATION

NCBI GenBank Nucleotide #	NM_171825
Molecular Weight	74kDa

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/camk2-alpha-recombinant-protein-sf9-insect-cells-wb-western-blot-kinase-assay/73306>