

Product datasheet

Recombinant human CaMKII alpha protein ab60899

[4 References](#) [5 Images](#)

Description

Product name	Recombinant human CaMKII alpha protein
Biological activity	256 nmol/min/mg
Purity	> 80 % Densitometry. Affinity purified.
Expression system	Baculovirus infected Sf9 cells
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Human
Sequence	MSPILGYWKI KGLVQPTRL L LEYLEEKYEE HLYERDEGDK WRNKKFELGL EFPNLPYYID GDVKLTQSMA IIRYADKHN MLGGCPKERA EISMLEGAVL DIRYGVSR IA YSKDFETLKV DFLSKLP EML KMFEDRLCHK TYLNGDHVTH PDFMLYDALD VVLYMDPMCL DAFP KLVCFK KRIEAI PQID KYLKSSKYIA WPLQGWQATF GGGDHPPKSD LVPRGSPEF MATITCTRFT E EYQLFEELG KGAFSVVRR C VKVLAGQEYA AKIINTKKLS ARDHQKLERE ARICRLLKHP NVRLHDSIS EEGHHYLIFD LVTGGELFED IVAREYSEA DASHCIQQIL EAVLHCHQMG VVHRDLKPEN LLLASKLKGA AVKLADFGLA IEVEGEQQAW FGFA GTPGYL SPEVLRKDPY GKPVDLWACG VILYLLVGY PPFWDEDQHR LYQQIKAGAY DFPSPEWDTV TPEAKDLINK MLTINPSKRI TAAEALKHPW ISHRSTVASC MHRQETVDCL KKFNARRK LK GAILTTMLAT RNFSGGKSGG NKKSDGVKES SESTNTTIED EDTKVRKQEI IKVTEQLIEA ISNGDFESYT KMCDPGMTAF EPEALGNLVE GLDFHRFYFE NLWSRNSKPV HTTILNPHIH LMGDESACIA YIRITQY LDA GGIPRTAQSE ETRVWHRRDG KWQIVHFHRS GAPSVLPH
Predicted molecular weight	74 kDa
Tags	GST tag N-Terminus

Specifications

Our **Abpromise guarantee** covers the use of **ab60899** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	Functional Studies SDS-PAGE Western blot
Form	Liquid
Additional notes	ab188554 (CaMKII peptide) can be utilized as a substrate for assessing Kinase activity

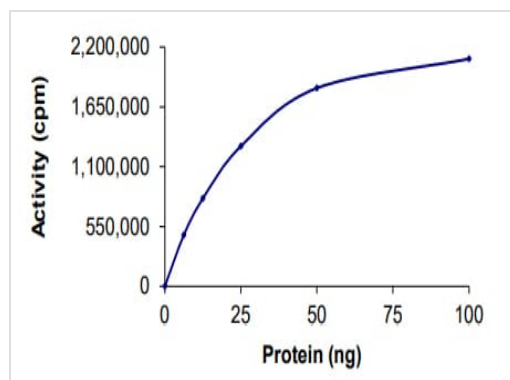
Preparation and Storage

Stability and Storage	Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles. pH: 7.50 Constituents: 0.0038% EGTA, 0.00174% PMSF, 0.00385% DTT, 0.79% Tris HCl, 0.00292% EDTA, 25% Glycerol (glycerin, glycerine), 0.87% Sodium chloride This product is an active protein and may elicit a biological response in vivo, handle with caution.
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General Info

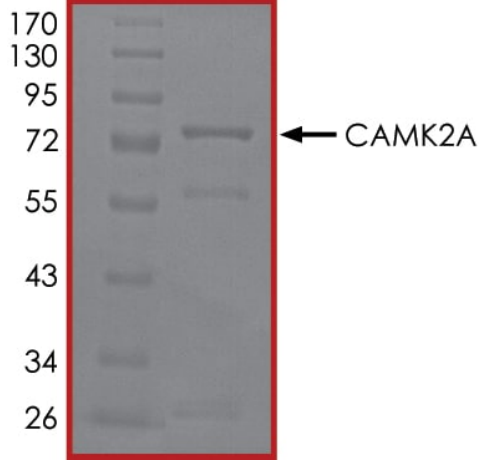
Function	CaM-kinase II (CAMK2) is a prominent kinase in the central nervous system that may function in long-term potentiation and neurotransmitter release. Member of the NMDAR signaling complex in excitatory synapses it may regulate NMDAR-dependent potentiation of the AMPAR and synaptic plasticity.
Sequence similarities	Belongs to the protein kinase superfamily. CAMK Ser/Thr protein kinase family. CaMK subfamily. Contains 1 protein kinase domain.
Cellular localization	Cell junction > synapse > presynaptic cell membrane. Cell junction > synapse. Postsynaptic lipid rafts.

Images



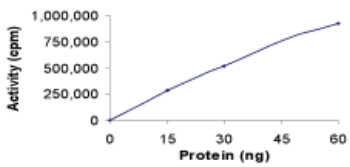
The specific activity of CaMKII alpha (ab60899) was determined to be 295 nmol/min/mg as per activity assay protocol

Functional Studies - Recombinant human CaMKII
alpha protein (ab60899)



SDS PAGE analysis of ab60899

SDS-PAGE - Recombinant human CaMKII alpha protein (ab60899)



Sample Kinase Activity Plot.

Functional Studies - Recombinant human CaMKII alpha protein (ab60899)



ab60899 on SDS-PAGE, MW ~74 kDa.

SDS-PAGE - Recombinant human CaMKII alpha protein (ab60899)



Western blot - Recombinant human CaMKII alpha protein (ab60899)

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