

Product datasheet

# Recombinant human CKII alpha prime polypeptide protein ab105125

[2 Images](#)

**Overview**

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**Product name** Recombinant human CKII alpha prime polypeptide protein  
**Protein length** Full length protein

**Description**

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**Nature** Recombinant  
**Source** Baculovirus infected Sf9 cells

**Amino Acid Sequence**

**Accession** [P19784](#)  
**Species** Human  
**Molecular weight** 64 kDa including tags  
**Amino acids** 1 to 350

**Specifications**

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Our [Abpromise guarantee](#) covers the use of **ab105125** in the following tested applications.

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

**Biological activity** Specific activity: 63 nmol/min/mg

**Applications** Western blot  
 Functional Studies

**Purity** > 95 % Densitometry.

**Form** Liquid

**Additional notes** [ab204855](#) (CKII peptide) can be utilized as a substrate for assessing kinase activity

**Preparation and Storage**

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**Stability and Storage** Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles.

pH: 7.50

Constituents: 0.307% Glutathione, 0.00174% PMSF, 0.00385% DTT, 0.79% Tris HCl, 0.00292% EDTA, 25% Glycerol, 0.87% Sodium chloride

This product is an active protein and may elicit a biological response in vivo, handle with caution.

## General Info

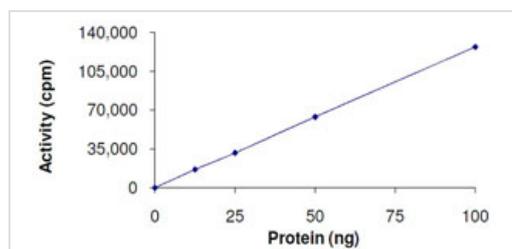
### Function

Catalytic subunit of a constitutively active serine/threonine-protein kinase complex that phosphorylates a large number of substrates containing acidic residues C-terminal to the phosphorylated serine or threonine. Regulates numerous cellular processes, such as cell cycle progression, apoptosis and transcription, as well as viral infection. May act as a regulatory node which integrates and coordinates numerous signals leading to an appropriate cellular response. During mitosis, functions as a component of the p53/TP53-dependent spindle assembly checkpoint (SAC) that maintains cyclin-B-CDK1 activity and G2 arrest in response to spindle damage. Also required for p53/TP53-mediated apoptosis, phosphorylating 'Ser-392' of p53/TP53 following UV irradiation. Can also negatively regulate apoptosis. Phosphorylates the caspases CASP9 and CASP2 and the apoptotic regulator NOL3. Phosphorylation protects CASP9 from cleavage and activation by CASP8, and inhibits the dimerization of CASP2 and activation of CASP8. Regulates transcription by direct phosphorylation of RNA polymerases I, II, III and IV. Also phosphorylates and regulates numerous transcription factors including NF-kappa-B, STAT1, CREB1, IRF1, IRF2, ATF1, SRF, MAX, JUN, FOS, MYC and MYB. Phosphorylates Hsp90 and its co-chaperones FKBP4 and CDC37, which is essential for chaperone function. Regulates Wnt signaling by phosphorylating CTNNB1 and the transcription factor LEF1. Acts as an ectokinase that phosphorylates several extracellular proteins. During viral infection, phosphorylates various proteins involved in the viral life cycles of EBV, HSV, HBV, HCV, HIV, CMV and HPV.

### Sequence similarities

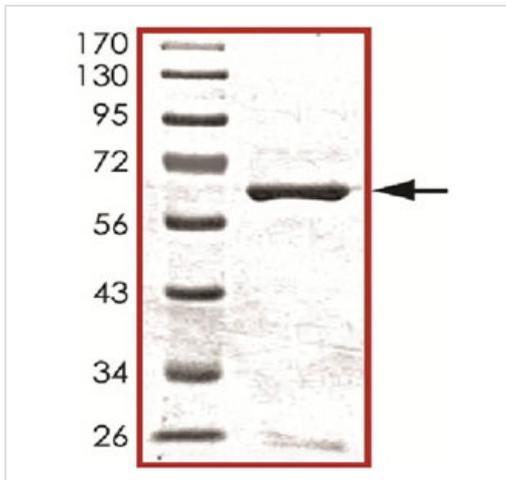
Belongs to the protein kinase superfamily. Ser/Thr protein kinase family. CK2 subfamily. Contains 1 protein kinase domain.

## Images



Sample Kinase Activity Plot. The specific activity of CKII alpha prime polypeptide was determined to be 63 nmol/min/mg.

Functional Studies - Recombinant human CKII alpha prime polypeptide protein (ab105125)



Recombinant human CKII alpha prime polypeptide protein (ab105125) + Full length recombinant human CKII alpha prime polypeptide plus proprietary tag

Sample Purity Data.

Western blot - Recombinant human CKII alpha prime polypeptide protein (ab105125)

**Please note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

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