

Product datasheet

Recombinant human Casein Kinase 1 alpha protein ab102102

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

Description

Product name	Recombinant human Casein Kinase 1 alpha protein
Biological activity	Specific activity is 120 nmol/min/mg
Purity	> 80 % Densitometry. The purity of Casein Kinase 1 alpha protein (Active) was >80% as assessed by densitometry. Affinity purified.
Expression system	Baculovirus infected Sf9 cells
Accession	<u>P48729</u>
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Human
Predicted molecular weight	62 kDa including tags
Amino acids	1 to 337
Tags	GST tag N-Terminus

Specifications

Our **Abpromise guarantee** covers the use of **ab102102** in the following tested applications.

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

Applications	Western blot Functional Studies
Form	Liquid
Additional notes	<u>ab91090</u> (Cow Casein full length protein) 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.
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pH: 7.50

Constituents: 0.307% Glutathione, 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.

General Info

Function

Casein kinases are operationally defined by their preferential utilization of acidic proteins such as caseins as substrates. It can phosphorylate a large number of proteins. Participates in Wnt signaling. Phosphorylates CTNNB1 at 'Ser-45'. May play a role in segregating chromosomes during mitosis.

Sequence similarities

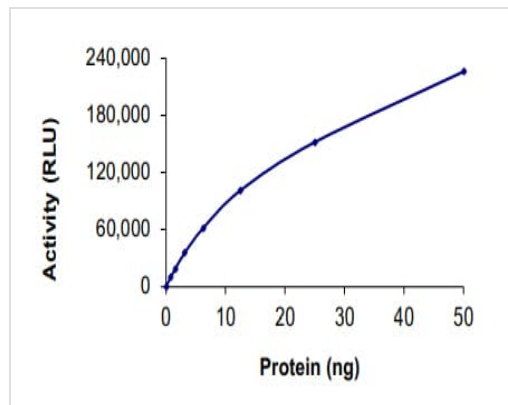
Belongs to the protein kinase superfamily. CK1 Ser/Thr protein kinase family. Casein kinase I subfamily.

Contains 1 protein kinase domain.

Cellular localization

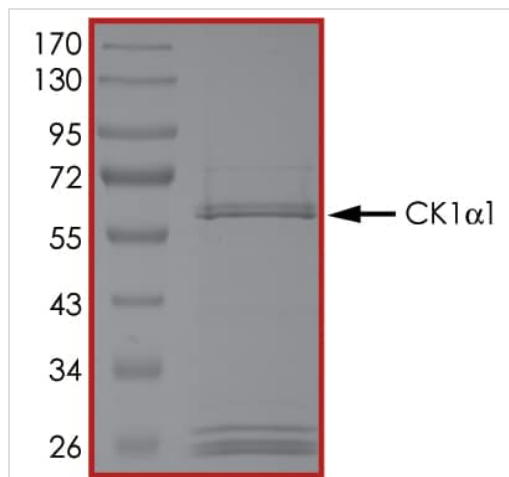
Cytoplasm. Cytoplasm > cytoskeleton > centrosome. Chromosome > centromere > kinetochore. Nucleus speckle. Localizes to the centrosome in interphase cells, and to kinetochore fibers during mitosis.

Images



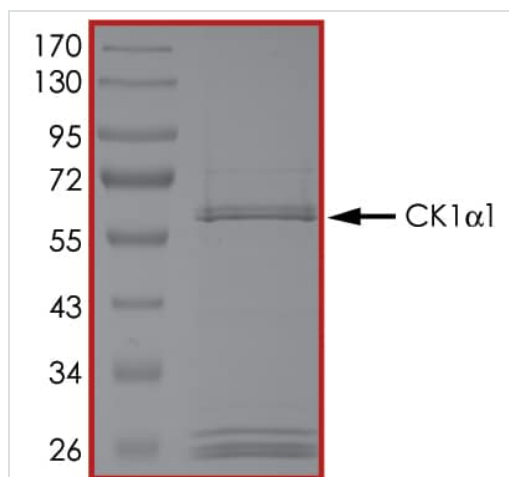
The specific activity of Casein Kinase 1 alpha (ab102102) was determined to be 69 nmol/min/mg as per activity assay protocol and was equivalent to 120 nmol/min/mg as per radiometric assay

Functional Studies - Recombinant human Casein
Kinase 1 alpha protein (ab102102)



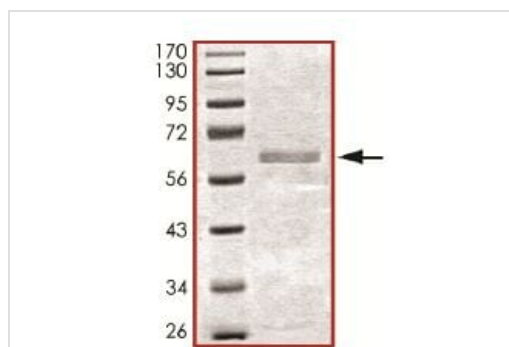
SDS PAGE analysis of ab102102

SDS-PAGE - Recombinant human Casein Kinase 1
alpha protein (ab102102)



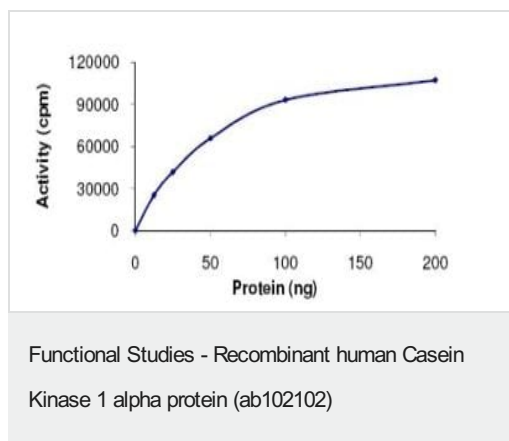
SDS PAGE analysis of ab102102

SDS-PAGE - Recombinant human Casein Kinase 1
alpha protein (ab102102)



ab102102 was determined to be >80% pure by densitometry. MWt
62 kDa.

SDS-PAGE - Recombinant human Casein Kinase 1
alpha protein (ab102102)



The specific activity of ab102102 was determined to be 120 nmol/min/mg.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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