abcam

Product datasheet

Recombinant human Casein Kinase 1 delta/CSNK1D protein ab103955

2 References 5 Images

Description

Product name	Recombinant human Casein Kinase 1 delta/CSNK1D protein
Biological activity	The Specific activity of ab103955 was determined to be 82 nmol/min/mg.
Purity	> 80 % Densitometry. Purity was determined to be >80% by densitometry. Affinity purified.
Expression system	Baculovirus infected Sf9 cells
Accession	P48730
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Human
Predicted molecular weight	72 kDa including tags
Amino acids	1 to 415

Specifications

Our **Abpromise guarantee** covers the use of **ab103955** 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	**ab91090** (Cow Casein full length protein) can be utilized as a substrate for assessing Kinase activity Previously labelled as Casein Kinase 1 delta.

Preparation and Storage

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

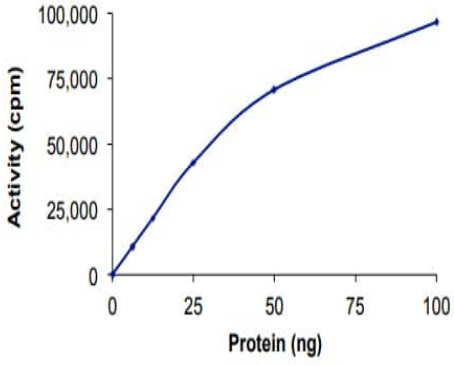
pH: 7.50
Constituents: 0.307% Glutathione, 0.00174% PMSF, 0.00385% DTT, 0.79% Tris HCl, 0.00292% EDTA, 25% Glycerol (glycerin, glycerine), 0.87% Sodium chloride

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

General Info

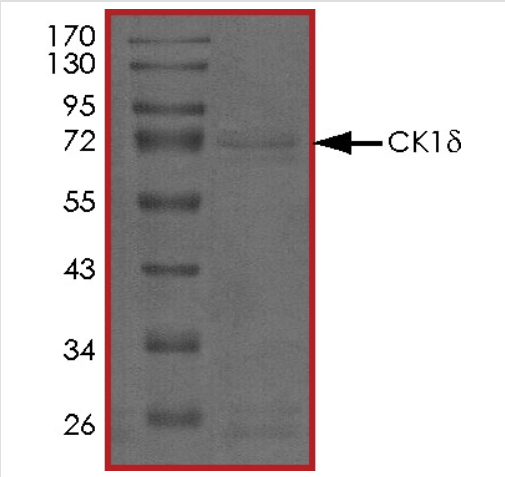
Function	Casein kinases are operationally defined by their preferential utilization of acidic proteins such as caseins as substrates. It can phosphorylate a large number of proteins. Participates in Wnt signaling. Central component of the circadian clock. May act as a negative regulator of circadian rhythmicity by phosphorylating PER1 and PER2. Retains PER1 in the cytoplasm.
Tissue specificity	Expressed in all tissues examined, including brain, heart, lung, liver, pancreas, kidney, placenta and skeletal muscle. In blood, highly expressed in hemopoietic cells and mature granulocytes. Also found in monocytes and lymphocytes.
Involvement in disease	Defects in CSNK1D are a cause of familial advanced sleep-phase syndrome (FASPS) [MIM:604348]. FASPS is characterized by very early sleep onset and offset. Individuals are 'morning larks' with a 4 hours advance of the sleep, temperature and melatonin rhythms.
Sequence similarities	Belongs to the protein kinase superfamily. CK1 Ser/Thr protein kinase family. Casein kinase I subfamily. Contains 1 protein kinase domain.
Post-translational modifications	Autophosphorylated on serine and threonine residues.
Cellular localization	Cytoplasm. Nucleus.

Images



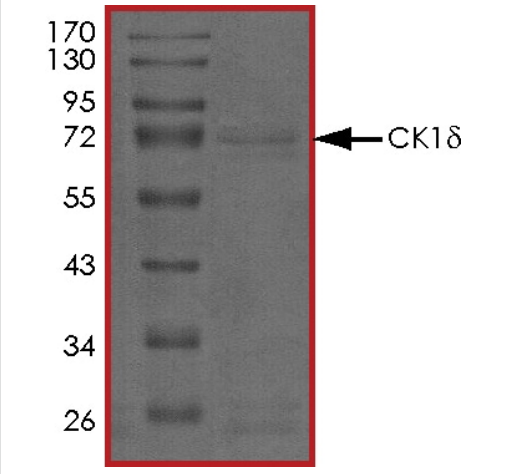
Functional Studies - Recombinant human Casein Kinase 1 delta/CSNK1D protein (ab103955)

The specific activity of Casein Kinase 1 delta/CSNK1D (ab103955) was determined to be 77 nmol/min/mg as per activity assay protocol



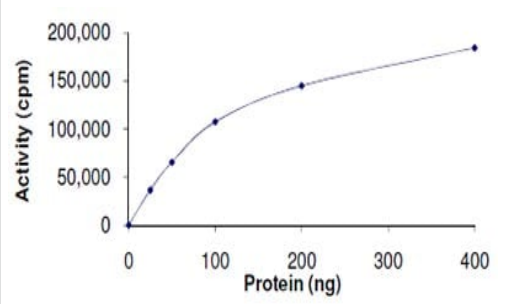
SDS-PAGE - Recombinant human Casein Kinase 1 delta/CSNK1D protein (ab103955)

SDS PAGE analysis of ab103955



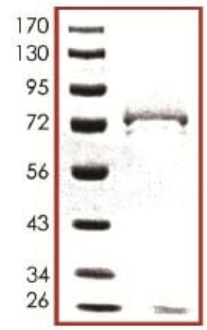
SDS-PAGE - Recombinant human Casein Kinase 1 delta/CSNK1D protein (ab103955)

SDS PAGE analysis of ab103955



Functional Studies - Recombinant human Casein Kinase 1 delta/CSNK1D protein (ab103955)

The Specific activity of ab103955 was determined to be 82 nmol/min/mg.



SDS-PAGE - Recombinant human Casein Kinase 1 delta/CSNK1D protein (ab103955)

SDS-PAGE showing ab103955 at approximately 72kDa.

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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit **https://www.abcam.com/abpromise** or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors