# abcam

## Product datasheet

## Recombinant Human Cdk7 protein ab126920

## 1 Image

**Description** 

Product name Recombinant Human Cdk7 protein

Purity > 95 % SDS-PAGE.

Assessed by densitometry. Affinity purified.

**Expression system** Baculovirus infected Sf9 cells

Accession P50613

Protein length Full length protein

Animal free No

**Nature** Recombinant

**Species** Human

Predicted molecular weight 66 kDa including tags

Amino acids 1 to 346

Tags GST tag N-Terminus

#### **Specifications**

Our Abpromise guarantee covers the use of ab126920 in the following tested applications.

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

Applications SDS-PAGE

Form Liquid

### **Preparation and Storage**

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

pH: 7.5

Preservative: 1.02% Imidazole

Constituents: 0.002% PMSF, 0.81% Sodium phosphate, 0.004% DTT, 25% Glycerol (glycerin,

glycerine), 1.76% Sodium chloride

#### **General Info**

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#### **Function**

Cyclin-dependent kinases (CDKs) are activated by the binding to a cyclin and mediate the progression through the cell cycle. Each different complex controls a specific transition between two subsequent phases in the cell cycle. CDK7 is the catalytic subunit of the CDK-activating kinase (CAK) complex, a serine-threonine kinase. CAK activates the cyclin-associated kinases CDK1, CDK2, CDK4 and CDK6 by threonine phosphorylation. CAK complexed to the core-TFIIH basal transcription factor activates RNA polymerase II by serine phosphorylation of the repetitive C-terminus domain (CTD) of its large subunit (POLR2A), allowing its escape from the promoter and elongation of the transcripts. Involved in cell cycle control and in RNA transcription by RNA polymerase II. Its expression and activity are constant throughout the cell cycle.

Tissue specificity Ubiquitous.

Sequence similarities Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. CDC2/CDKX

subfamily.

Contains 1 protein kinase domain.

**Post-translational** Phosphorylation of Ser-164 during mitosis inactivates the enzyme.

modifications Phosphorylation of Thr-170 is required for activity.

Cellular localization Nucleus.

#### **Images**



SDS-PAGE analysis of ab126920.

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

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