

Datasheet for ABIN7195307

**CDK1 Protein (GST tag,His tag)**[Go to Product page](#)**1** Image

## Overview

Quantity:	50 µg
Target:	CDK1
Origin:	Mouse
Source:	Baculovirus infected Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This CDK1 protein is labelled with GST tag,His tag.

## Product Details

Purpose:	Recombinant Mouse CDC2 Kinase/CDK1 Protein (His & GST Tag)(Active)
Sequence:	Met1-Met297
Characteristics:	A DNA sequence encoding the mouse CDK1 (P11440) (Met1-Met297) was expressed with the N-terminal polyhistidine-tagged GST tag at the N-terminus.
Purity:	> 85 % as determined by SDS-PAGE
Endotoxin Level:	< 1.0 EU per µg of the protein as determined by the LAL method.
Biological Activity Comment:	Kinase activity untested

## Target Details

Target:	CDK1
Alternative Name:	CDC2 Kinase/CDK1 ( <a href="#">CDK1 Products</a> )
Background:	Background: CDC2, also known as CDK1, contains 1 protein kinase domain and belongs to the

## Target Details

protein kinase superfamily, CMGC Ser/Thr protein kinase family, CDC2/CDKX subfamily. CDC2 is a catalytic subunit of the highly conserved protein kinase complex known as M-phase promoting factor (MPF), which is essential for G1/S and G2/M phase transitions of eukaryotic cell cycle. Mitotic cyclins stably associate with CDC2 and function as regulatory subunits. The kinase activity of CDK1 is controlled by cyclin accumulation and destruction through the cell cycle. The phosphorylation and dephosphorylation of CDC2 also play important regulatory roles in cell cycle control. It is required in higher cells for entry into S-phase and mitosis. CDC2 also is a cyclin-dependent kinase which displays CTD kinase activity and is required for RNA splicing. It has CTD kinase activity by hyperphosphorylating the C-terminal heptapeptide repeat domain (CTD) of the largest RNA polymerase II subunit RPB1, thereby acting as a key regulator of transcription elongation. CDK1 is required for RNA splicing, possibly by phosphorylating SRSF1/SF2. It is involved in regulation of MAP kinase activity, possibly leading to affect the response to estrogen inhibitors.

Synonym: Cdc2;CDC2>Cdc2a;p34<

Molecular Weight: 61.9 kDa

UniProt: [P11440](#)

Pathways: [Cell Division Cycle](#), [Fc-epsilon Receptor Signaling Pathway](#), [Neurotrophin Signaling Pathway](#), [Activation of Innate immune Response](#), [Mitotic G1-G1/S Phases](#), [DNA Replication](#), [M Phase](#), [Toll-Like Receptors Cascades](#), [Synthesis of DNA](#)

## Application Details

Restrictions: For Research Use only

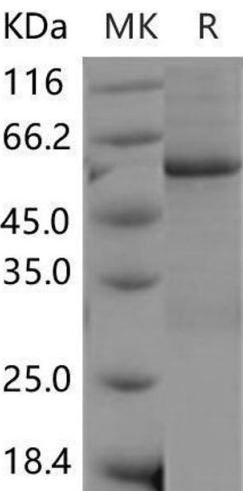
### Handling

Format: Frozen, Liquid

Buffer: Supplied as sterile 20 mM Tris, 500 mM NaCl, 10 % glycerol, pH 8.0

Storage: -20 °C

Storage Comment: Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.



Western Blotting

Image 1.