

# Recombinant Human Cyclin-Dependent Kinase 1, GST-tagged

**Cat. No.** CDK1-998H    **Lot. No.** (See product label)

## SPECIFICATION

<b>Product Overview</b>	Recombinant full-length human CDK1 was expressed by baculovirus in Sf9 insect cells using an N-terminal GST tag.
<b>Species</b>	Human
<b>Source</b>	Sf9 Cells
<b>Description</b>	CDK1 or Cell Division Control protein 1 is essential for the completion of START, the controlling event in the cell cycle that is required to initiate mitosis. CDK1 is a catalytic subunit of a protein kinase complex, called the M-Phase Promoting Factor that induces entry into mitosis and is universal among eukaryotes. Phosphorylation of Bcl-2 in G2/M phase-arrested cells following photodynamic therapy with hypericin involves a CDK1-mediated signal and delays the onset of apoptosis. Therapeutic potential of CDK inhibitor NU2058 in androgen-independent prostate cancer has also been demonstrated.
<b>Applications</b>	Kinase Assay; Western Blot
<b>Molecular Weight</b>	58 kDa
<b>Expression System</b>	Sf9 insect cells using baculovirus
<b>Form</b>	Recombinant protein stored in 50 mM Tris-HCl, pH 7.5, 50 mM NaCl, 0.25 mM DTT, 0.1 mM EDTA, 0.1 mM PMSF, 25 % glycerol.

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<b>Purity</b>	> 95 %
<b>Concentration</b>	0.2 ug/ul
<b>Sequences</b>	Full-length
<b>Storage</b>	Store product at -70°C. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles.
<b>Pathways</b>	ARMS-mediated activation; Activated TLR4 signalling; Androgen Receptor Signaling Pathway; Axon guidance; Cell Cycle Checkpoints; Cell Cycle; Centrosome maturation; Cyclin B2 mediated events; Down-stream signal transduction; E2F transcription factor network; ERK activation; ERK1 activation; Gap junction; Hedgehog Signaling Pathway; Herpes simplex infection

## GENE INFORMATION

<b>Gene Name</b>	<a href="#">CDK1 cyclin-dependent kinase 1 [ Homo sapiens ]</a>
<b>Official Symbol</b>	CDK1
<b>Synonyms</b>	CDK1; cyclin-dependent kinase 1; CDC2; CDC28A; P34CDC2; MGC111195; DKFZp686L20222; cell division cycle 2; OTTHUMP00000019659; OTTHUMP00000019660; OTTHUMP00000019661; p34 protein kinase; cell cycle controller CDC2; cell division control protein 2 homolog; cell division cycle 2, G1 to S and G2 to M; EC 2.7.11.23; EC 2.7.11.22; CCNA2; cyclin A2; CCN1; CCNA; Cyclin-A; Cyclin-A2
<b>Gene ID</b>	<a href="#">983</a>

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<b>mRNA Refseq</b>	NM_001786
<b>Protein Refseq</b>	NP_001777
<b>MIM</b>	116940
<b>UniProt ID</b>	P06493
<b>Chromosome Location</b>	10q21.1
<b>Function</b>	ATP binding; Hsp70 protein binding; RNA polymerase II carboxy-terminal domain kinase activity; cyclin binding; cyclin-dependent protein kinase activity; histone kinase activity; nucleotide binding; protein binding; protein kinase activity

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