

## Recombinant Human CDK1, Unactive, GST-tagged

Cat. No. CDK1-1533H 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>ProteinLength</b>	Full length
<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>Form</b>	Recombinant protein stored in 50mM Tris-HCl, pH 7.5, 50mM NaCl, 0.25mM DTT, 0.1mM EDTA, 0.1mM PMSF, 25% glycerol.
<b>Molecular Mass</b>	~58 kDa
<b>Purity</b>	>95%

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

<b>Applications</b>	Kinase Assay, Western Blot
<b>Storage</b>	Store at $-70^{\circ}\text{C}$ . For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. Avoid freeze/thaw cycles.
<b>Concentration</b>	0.2 $\mu\text{g}/\mu\text{l}$
<b>GENE INFORMATION</b>	
<b>Gene Name</b>	CDK1 cyclin-dependent kinase 1 [ Homo sapiens ]
<b>Official Symbol</b>	CDK1
<b>Synonyms</b>	CDK1; cyclin-dependent kinase 1; CDC2, cell division cycle 2, G1 to S and G2 to M; CDC28A; p34 protein kinase; cell cycle controller CDC2; cell division protein kinase 1; cell division control protein 2 homolog; cell division cycle 2, G1 to S and G2 to M; CDC2; P34CDC2; MGC111195; DKFZp686L20222;
<b>Gene ID</b>	983
<b>mRNA Refseq</b>	NM_001170406
<b>Protein Refseq</b>	NP_001163877
<b>MIM</b>	116940
<b>UniProt ID</b>	P06493
<b>Chromosome Location</b>	10q21.2

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

**Pathway**

APC/C-mediated degradation of cell cycle proteins, organism-specific biosystem;  
APC/C:Cdc20 mediated degradation of Cyclin B, organism-specific biosystem;  
APC/C:Cdc20 mediated degradation of mitotic proteins, organism-specific biosystem;  
ARMS-mediated activation, organism-specific biosystem; Activated TLR4 signalling,  
organism-specific biosystem; Activation of APC/C and APC/C:Cdc20 mediated  
degradation of mitotic proteins, organism-specific biosystem; Androgen Receptor  
Signaling Pathway, organism-specific biosystem;

**Function**

ATP binding; Hsp70 protein binding; RNA polymerase II carboxy-terminal domain  
kinase activity; cyclin binding; cyclin-dependent protein kinase activity; cyclin-  
dependent protein kinase activity; histone kinase activity; nucleotide binding; protein  
binding; protein kinase activity;

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA