

Recombinant Human cyclin-dependent kinase 1, His-tagged

Cat. No. CDK1-654H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	CDK1, 1-297aa Human, His tag, Insect cell
Species	Human
Source	Insect Cells
ProteinLength	1-297 a.a.
Description	Cyclin-dependent kinase 1, also known as CDK1, plays a key role in the control of the eukaryotic cell cycle by modulating the centrosome cycle as well as mitotic onset; promotes G2-M transition, and regulates G1 progress and G1-S transition via association with multiple interphase cyclins. This protein is required in higher cells for entry into S-phase and mitosis. Recombinant human CDK1 protein, fused to His-tag at C-terminus, was expressed in insect cells using baculovirus expression system and purified by using conventional chromatography techniques.
Form	Liquid. In Phosphate buffered saline (pH7.4), 30% glycerol, 2mM DTT, 0.1mM PMSF
Molecular Mass	35.1 kDa (305aa)
AA Sequence	MEDYTKIEKI GEGTYGVVYK GRHKTTGQVV AMKKIRLESE EEGVPSTAIR EISLLKELRH PNIVSLQDVL MQDSRLYLIF EFLSMDLKKY LDSIPPGQYM DSSLVKSPLY QILQGIVFCH SRRVLHRDLK PQNLLIDDKG TIKLADFGLA RAFGIPIRVY THEVVTWLWYR SPEVLLGSAR YSTPVDIWSI GTIFAEELATK KPLFHGDSEI DQLFRIFRAL GTPNNEVWPE VESLQDYKNT FPKWKPGSLA

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

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

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

SHVKNLDENG LDLLSKMLIY DPAKRISGKM ALNHPYFNDL DNQIKKMLEH HHHHH

Purity >95% by SDS - PAGE

Storage Can be stored at +4C short term (1-2 weeks). For long term storage, aliquot and store at -20C or -70C. Avoid repeated freezing and thawing cycles.

Concentration 0.5 mg/ml (determined by Bradford assay)

GENE INFORMATION

Gene Name CDK1 cyclin-dependent kinase 1 [Homo sapiens]

Official Symbol CDK1

Synonyms 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;

Gene ID 983

mRNA Refseq NM_001170406

Protein Refseq NP_001163877

MIM 116940

UniProt ID P06493

Chromosome Location 10q21.2

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

 Email: 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