

## CDK1 cDNA

Catalog Number: ATGD0111

### PRODUCT INFORMATION

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**Catalog number**

ATGD0111

**Product type**

cDNA

**Species**

Human

**NCBI Accession No.**

NP\_001777.1

**Alternative Names**

CDC2, CDC28A, P34CDC2

**mRNA Refseq**

NM\_001786.4

**OMIM**

116940

**Chromosome location**

10q21.1

### PRODUCT SPECIFICATION

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**Formulation**

Lyophilized

**Storage**

Store the plasmid at -20C.

**cDNA Size**

894bp

**Preparation before usage**

1. Centrifuge at 7000rpm for 1 minute.
2. Carefully open the vial and add 100ul of sterile water to dissolve the DNA. Each tube contains approximately 10ug of lyophilized plasmid.

**Vector description**

This shuttle vector contains the complete ORF. It is inseted BamH I to Xho I. The gene insert contains multiple cloning sites which can be used to easily cut and transfer the gene and recombination site into your expression vector.

**Cloning Vector**

pATGen (puc19-derived cloning vector)

**General Description**

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The protein encoded by CDK1 is a member of the Ser/Thr protein kinase family. This protein 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 this protein and function as regulatory subunits. The kinase activity of this protein is controlled by cyclin accumulation and destruction through the cell cycle. The phosphorylation and dephosphorylation of this protein also play important regulatory roles in cell cycle control. Alternatively spliced transcript variants encoding different isoforms have been found for this gene.

### DATA

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#### Sequence nucleotides

```
ATGGAAGATTATACCAAATAGAGAAAATTGGAGAAGGTACCTATGGAGTTGTGTATAAGGGTAGACACAAAACCTACAGGTC
AAGTGGTAGCCATGAAAAAATCAGACTAGAAAGTGAAGAGGAAGGGGTTCTAGTACTGCAATTCGGGAAATTTCTCTATT
AAAGGAACCTTCGTCATCCAAATATAGTCAGTCTTCAGGATGTGCTTATGCAGGATTCCAGGTTATATCTCATCTTTGAGTTTC
TTTCCATGGATCTGAAGAAATACTTGGATTCTATCCCTCCTGGTCAGTACATGGATTCTTCACTTGTTAAGAGTTATTTATAACC
AAATCCTACAGGGGATTGTGTTTTGTCACTCTAGAAGAGTTCTTACAGAGACTTAAAACCTCAAATCTCTTGATTGATGAC
AAAGGAACAATTAACCTGGCTGATTTTGGCCTTGCCAGAGCTTTTGAATACCTATCAGAGTATATACACATGAGGTAGTAA
CACTCTGGTACAGATCTCCAGAAGTATTGCTGGGGTCAGCTCGTTACTCAACTCCAGTTGACATTTGGAGTATAGGCACCAT
ATTTGCTGAAGTACTGCAACTAAGAAACCACTTTTCCATGGGGATTGAGAAATTGATCAACTCTTCCAGGATTTTCAGAGCTTTGG
GCACTCCCAATAATGAAGTGTGGCCAGAAGTGAATCTTTACAGGACTATAAGAATACATTTCCCAAATGGAAACCAAGGAAG
CCTAGCATCCCATGTCAAAAACCTGGATGAAAATGGCTTGGATTTGCTCTCGAAAATGTTAATCTATGATCCAGCCAAACGAA
TTTCTGGCAAATGGCACTGAATCATCCATATTTAATGATTTGGACAATCAGATTAAGAAGATGTAG
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#### Transaction Sequence

```
MEDYTKIEKI GEGTYGVVYK GRHKTTGQVV AMKKIRLESE EEGVPSTAIR EISLLKELRH PNVSLQDVL MQDSRLYLIF
EFLSMDLKKY LDSIPPGQYM DSSLVKSPLY QILQGIVFCH SRRVLHRDLK PQNLLIDDKG TIKLADFGLA RAFGIPIRVY
THEVVTWYR SPEVLLGSAR YSTPVDIWSI GTIFAELATK KPLFHGDSEI DQLFRIFRAL GTPNNEVWPE VESLQDYKNT
FPKWKPGSLA SHVKNLDENG LDLLSKMLIY DPAKRISGKM ALNHPYFNDL DNQIKKM
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