

## Product datasheet for **SC328178**

### CDK1 (NM\_001170406) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	CDK1 (NM_001170406) Human Untagged Clone
Tag:	Tag Free
Symbol:	CDK1
Synonyms:	CDC2; CDC28A; P34CDC2
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_001170406, the custom clone sequence may differ by one or more nucleotides ATGGAAGATTATACCAAAATAGAGAAAATTGGAGAAGGTACCTATGGAGTTGTGTATAAG GGTAGACACAAAACACTACAGGTCAAGTGGTAGCCATGAAAAAATCAGACTAGAAAGTGAA GAGGAAGGGGTTCTAGTACTGCAATTCGGGAAATTTCTTATTAAGGAACTTCGTCAT CCAAATATAGTCAGTCTTCAGGATGTGCTTATGCAGGATTCCAGTTATATCTCATCTTT GAGTTTCTTTCCATGGATCTGAAGAAATACTTGGATTCTATCCCTCCTGGTCAGTACATG GATTCTTCACTTGTTAAGGTAAGCTTAA
Restriction Sites:	Please inquire
ACCN:	NM_001170406
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
OTI Annotation:	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).



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**Reconstitution Method:**

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

**RefSeq:** [NM\\_001170406.1](#), [NP\\_001163877.1](#)

**RefSeq Size:** 1754 bp

**RefSeq ORF:** 330 bp

**Locus ID:** 983

**Cytogenetics:** 10q21.2

**Protein Families:** Druggable Genome, Protein Kinase, Stem cell - Pluripotency

**Protein Pathways:** Cell cycle, Gap junction, Oocyte meiosis, p53 signaling pathway, Progesterone-mediated oocyte maturation

**Gene Summary:** The protein encoded by this gene 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. [provided by RefSeq, Mar 2009]

Transcript Variant: This variant (4) differs in the 5' UTR, 3' coding region and 3' UTR, compared to variant 1. The resulting isoform (4) has a distinct C-terminus and is shorter than isoform 1. Both variants 4 and 5 encode the same isoform (4).