

## Product datasheet for RC229541L4V

## OriGene Technologies, Inc.

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## CDK1 (NM\_001170407) Human Tagged ORF Clone Lentiviral Particle

**Product data:** 

**Product Type:** Lentiviral Particles

**Product Name:** CDK1 (NM\_001170407) Human Tagged ORF Clone Lentiviral Particle

Symbol: CDK1

Synonyms: CDC2; CDC28A; P34CDC2

Mammalian Cell

Selection:

Puromycin

**Vector:** pLenti-C-mGFP-P2A-Puro (PS100093)

Tag: mGFP

**ACCN:** NM\_001170407

ORF Size: 327 bp

**ORF Nucleotide** 

The ORF insert of this clone is exactly the same as(RC229541).

Sequence:

OTI Disclaimer:

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

**RefSeq:** NM 001170407.1, NP 001163878.1

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

**MW:** 12.9 kDa







## **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]