

Product datasheet for RC229541L3

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OriGene Technologies, Inc.

CDK1 (NM_001170407) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: CDK1 (NM 001170407) Human Tagged Lenti ORF Clone

Tag: Myc-DDK

Symbol: CDK1

CDC2; CDC28A; P34CDC2 Synonyms:

Mammalian Cell Puromycin

Selection:

Vector: pLenti-C-Myc-DDK-P2A-Puro (PS100092)

E. coli Selection: Chloramphenicol (34 ug/mL)

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

Sequence:

Sgfl-Mlul

Restriction Sites: Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF.

ACCN: NM_001170407

ORF Size: 327 bp



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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.

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).

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: <u>NM 001170407.1</u>, <u>NP 001163878.1</u>

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]