

# Product datasheet for RC225673L4

#### OriGene Technologies, Inc.

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# Cyclin A1 (CCNA1) (NM\_001111046) Human Tagged Lenti ORF Clone

### **Product data:**

**Product Type:** Expression Plasmids

Product Name: Cyclin A1 (CCNA1) (NM\_001111046) Human Tagged Lenti ORF Clone

Tag: mGFP

Symbol: Cyclin A1

Synonyms: CT146

Mammalian Cell Puromycin

Selection:

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

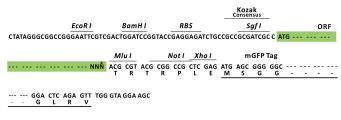
Sgfl-Mlul

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

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC225673).

Sequence:

Restriction Sites: Cloning Scheme:

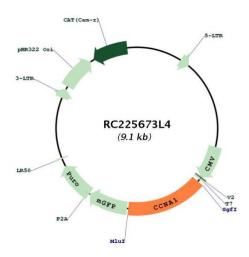


<sup>\*</sup> The last codon before the Stop codon of the ORF.





#### Plasmid Map:



**ACCN:** NM\_001111046

ORF Size: 1395 bp

**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 001111046.1, NP 001104516.1</u>

RefSeq Size: 1844 bp RefSeq ORF: 1266 bp



## Cyclin A1 (CCNA1) (NM\_001111046) Human Tagged Lenti ORF Clone - RC225673L4

 Locus ID:
 8900

 UniProt ID:
 P78396

 Cytogenetics:
 13q13.3

**Protein Families:** Druggable Genome

**Protein Pathways:** Acute myeloid leukemia, Cell cycle, Pathways in cancer, Progesterone-mediated oocyte

maturation

MW: 52.2 kDa

**Gene Summary:** The protein encoded by this gene belongs to the highly conserved cyclin family, whose

members are characterized by a dramatic periodicity in protein abundance through the cell

cycle. Cyclins function as regulators of CDK kinases. Different cyclins exhibit distinct

expression and degradation patterns which contribute to the temporal coordination of each mitotic event. The cyclin encoded by this gene was shown to be expressed in testis and brain, as well as in several leukemic cell lines, and is thought to primarily function in the control of the germline meiotic cell cycle. This cyclin binds both CDK2 and CDC2 kinases, which give two distinct kinase activities, one appearing in S phase, the other in G2, and thus regulate

separate functions in cell cycle. This cyclin was found to bind to important cell cycle

regulators, such as Rb family proteins, transcription factor E2F-1, and the p21 family proteins.

Multiple transcript variants encoding different isoforms have been found for this gene.

[provided by RefSeq, Jul 2008]