

Product datasheet for RC204289L3

OriGene Technologies, Inc.

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Cyclin E1 (CCNE1) (NM_001238) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Cyclin E1 (CCNE1) (NM_001238) Human Tagged Lenti ORF Clone

Tag:Myc-DDKSymbol:Cyclin E1

Synonyms: CCNE; pCCNE1

Mammalian Cell Puromycin

Selection:

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

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

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC204289).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





 $[\]ensuremath{^*}$ The last codon before the Stop codon of the ORF.

ACCN: NM_001238

ORF Size: 1230 bp





Cyclin E1 (CCNE1) (NM_001238) Human Tagged Lenti ORF Clone - RC204289L3

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 001238.1</u>

RefSeq Size:2021 bpRefSeq ORF:1233 bp

Locus ID: 898

 UniProt ID:
 P24864

 Cytogenetics:
 19q12

Domains: cyclin C, CYCLIN, cyclin

Protein Families: Druggable Genome, Stem cell - Pluripotency, Stem cell relevant signaling - DSL/Notch

pathway, Transcription Factors

Protein Pathways: Cell cycle, Oocyte meiosis, p53 signaling pathway, Pathways in cancer, Prostate cancer, Small

cell lung cancer

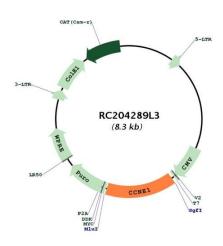
MW: 47.1 kDa



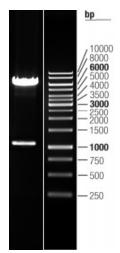
Gene Summary:

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. This cyclin forms a complex with and functions as a regulatory subunit of CDK2, whose activity is required for cell cycle G1/S transition. This protein accumulates at the G1-S phase boundary and is degraded as cells progress through S phase. Overexpression of this gene has been observed in many tumors, which results in chromosome instability, and thus may contribute to tumorigenesis. This protein was found to associate with, and be involved in, the phosphorylation of NPAT protein (nuclear protein mapped to the ATM locus), which participates in cell-cycle regulated histone gene expression and plays a critical role in promoting cell-cycle progression in the absence of pRB. [provided by RefSeq, Apr 2016]

Product images:



Circular map for RC204289L3



Double digestion of RC204289L3 using Sgfl and Mlul $\,$