

Product datasheet for **RG213217**

Cyclin E1 (CCNE1) (NM_057182) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cyclin E1 (CCNE1) (NM_057182) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Cyclin E1
Synonyms:	CCNE; pCCNE1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG213217 representing NM_057182 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCCGAGGGAGCGCAGGGAGCGGGATGCGAAGGAGCGGGACACCATGAAGGAGGACGGCGCGCGGAGT
TCTCGGCTCGCTCCAGGAAGAGGAAGGCAAACGTGACCGTTTTTTTGCAGGATCCAGATGAAGAAATGGC
CAAAATCGACAGGACGGCGAGGGACCAGTGTGGGAGCCAGCCTTTGGACAATAATGCAGTCTGTGCAGAC
CCCTGCTCCCTGATCCCCACACCTGACAAAGAAGATGATGACCGGTTTACCCAAACTCAACGTGAAGC
CTCGGATTATTGCACCATCCAGAGGCTCCCGCTGCCTGTACTGAGCTGGCAAATAGAGAGGAAGTCTG
GAAATCATGTTAAACAAGGAAAAGACATACTTAAGGGATCAGCACTTTCTTGAGCAACACCCTCTTCTG
CAGCCAAAATGCGAGCAATTCTTCTGGATTGGTTAATGGAGGTGTGTAAGTCTATAAACTTCACAGGG
AGACCTTTTACTTGGCACAAGATTTCTTTGACCGGTATATGGCGACACAAGAAAATGTTGTA AAAACTCT
TTTACAGCTTATTGGGATTTTCATCTTTATTTATTCAGCCAAACTTGAGGAAATCTATCCTCCAAAGTTG
CACCAGTTTGGTATGTGACAGATGGAGCTTGTTCAGGAGATGAAATCTCACCATGGAATTAATGATTA
TGAAGGCCCTTAAGTGGCGTTTAAAGTCCCTGACTATTGTGTCTGGCTGAATGTATACATGCAGGTTGC
ATATCTAAATGACTTACATGAAGTGTACTGCCGAGTATCCCCAGCAAATCTTTATACAGATTGCAGAG
CTGTTGGATCTCTGTCTCTGGATGTTGACTGCCCTTGAATTTCTTATGGTATACTTGTCTCTCGGCTT
TGATCATTTCTCGTCATCTGAATTGATGCAAAAAGGTTTCAGGGTATCAGTGGTGCACATAGAGAACTG
TGCAAGTGGATGTTCCATTTGCCATGTTTAAAGGGAGACGGGGAGCTCAAAACTGAAGCACTTCAGG
GGCGTCGCTGATGAAGATGCACACAACATACAGACCCACAGAGACAGCTTGGATTTGCTGGACAAAGCCC
GAGCAAAGAAAGCCATGTTGTCTGAACAAAATAGGGCTTCTCTCTCCCCAGTGGGCTCCTCACCCCGCC
ACAGAGCGGTAAGAAGCAGAGCAGCGGGCCGGAATGGCG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG213217 representing NM_057182
 Red=Cloning site Green=Tags(s)

MPRRERERDAKERDTMKEDGGAEFSAARSRKRVKANTVFLQDPDEEMAKIDRTARDQCGSQPWDNNAVCAD
 PCSLIPTPKEDDDRVPNSTCKPRIIAPSRGSPVLSWANREEVWKIMLNKEKTYLRDQHFLQHPLL
 QPKMRAILLDWLMEVCEVYKLRHRETFYLAQDFDRYMATQENVVKTLLQLIGISSLFIAAKLEEIYPPKL
 HQFAYVTDGACSGDEILTMELMIMKALKWRLSPLTIVSWLNVYMQVAYLNDLHEVLLPQYPQQIFIQIAE
 LLDLCLVLDVDCLEFPYGI LAASALYHFSSELQKVSQYQWCDIENCVKWMVPMVIRETGSSKCLKHFR
 GVADEDAHNIQTHRDSLDDLDKARAKKAMLSEQNRASPLPSGLLTPPQSGKKQSSGPEMA

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_057182

ORF Size: 1233 bp

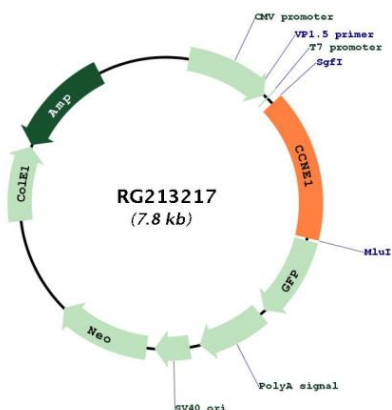
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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:	<ol style="list-style-type: none">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_057182.1, NP_476530.1</u>
RefSeq Size:	1787 bp
RefSeq ORF:	1187 bp
Locus ID:	898
Cytogenetics:	19q12
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
Gene Summary:	<p>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]</p>

Product images:



Circular map for RG213217