

Product datasheet for RC218597

Cyclin E2 (CCNE2) (NM_057749) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cyclin E2 (CCNE2) (NM_057749) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cyclin E2
Synonyms:	CYCE2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC218597 representing NM_057749 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTCAAGACGAAGTAGCCGTTTACAAGCTAAGCAGCAGCCCCAGCCAGCCAGACGGAATCCCCCAAG
AAGCCCAGATAATCCAGGCCAAGAAGAGGAAAACACCCAGGATGTCAAAAAAGAAGAGAGGAGGTAC
CAAGAAACATCAGTATGAAATTAGGAATTGTTGGCCACCTGTATTATCTGGGGGATCAGTCCTTGCAAT
ATCATTGAAACACCTCACAAGAAATAGGAACAAGTGATTTCTCCAGATTTACAAATTACAGATTTAAAA
ATCTTTTTTAAATCCTTACCTTTGCCTGATTTAAGCTGGGGATGTTCAAAGAAGTCTGGCTAAACAT
GTTAAAAAAGGAGAGCAGATATGTTTCATGACAAACATTTTGAAGTCTGCATTCTGACTTGAACCCAG
ATGAGGTCCATACTTCTAGACTGGCTTTTAGAGGTATGTGAAGTATACACTTTCATAGGAAAACATTTT
ATCTTGCACAAGACTTTTTTGTATAGATTATGTTGACACAAAAGGATATAAATAAAAAATAGCTTCAACT
CATTGGAATTACCTCATTATTCATTGCTTCCAACTTGAGGAAATCTATGCTCCTAACTCCAAGAGTTT
GCTTACGTCAGTATGGTCTTGCAGTGAAGAGGATATCTTAAGGATGGAACCTATTATATTAAGGCTT
TAAATGGGAACTTTGCCTGTAAACAATCATCTCTGGCTAAATCTTTTCTCCAAGTTGATGCTCTTAA
AGATGCTCCTAAAGTTCTTCTACCTCAGTATTCTCAGGAAACATTCAATCAAATAGCTCAGCTTTTAGAT
CTGTGTATTCTAGCCATTGATTCATTAGAGTTCCAGTACAGAATACTGACTGCTGCTGCTGCTGCTGCTG
TTACCTCCATTGAAGTGGTTAAGAAAGCCTCAGGTTTGGAGTGGGACAGTATTTTCAAGTGTGTAGATTG
GATGGTACCTTTTGTCAATGTAGTAAAAAGTACTAGTCCAGTGAAGCTGAAGACTTTTAAAGAAGATTCTT
ATGGAAGACAGACATAATATCCAGACACATAAACTATTTGGCTATGCTGGAGGAAGTAAATTACATAA
ACACCTTCAGAAAAGGGGACAGTTGTCCACAGTGTGCAATGGAGGCATTATGACACCACCGAAGAGCAC
TGAAAAACCACCAGGAAAAAC

ACGCGTACGCGGCCGCTCGAGCAGAAAACATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC218597 representing NM_057749
Red=Cloning site Green=Tags(s)

MSRRSSRLQAKQQPQPSQTESPQEAQIIQAKKRKTTQDVKKRREEVTKKHQYEIRNCWPPVLSGGISPCII
 IETPHKEIGTSDFSRFTNYRFKNLFINPSPLPDLSWGCSKEVWLNMLKESRYVHDKHFEVLHSDLEPQ
 MRSILLDWLLEVCEVYTLHRETFYLAQDFDFRMLTQKDINKNMLQLIGITSLFIASKLEEIYAPKLQEF
 AYVTDGACSEEDILRMELIILKALKWELCPVTIISWLNLFQVDALKDAPKVLPLQYSQETFIQIAQLLD
 LCILAIIDSLEFQYRILTAALCHFTSIEVVKKASGLEWDSISECDMMVPFVNVVKSTSPVKLKTFFKKIP
 MEDRHNIQTHNTYLAMLEEVNYINTFRKGGQLSPVCNGGIMTPPKSTEKPPGKH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6037_f03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_057749

ORF Size: 1212 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: [NM_057749.2](#)

RefSeq Size: 2748 bp

RefSeq ORF: 1215 bp

Locus ID: 9134

UniProt ID: [O96020](#)

Cytogenetics: 8q22.1

Domains: cyclin_C, CYCLIN, cyclin

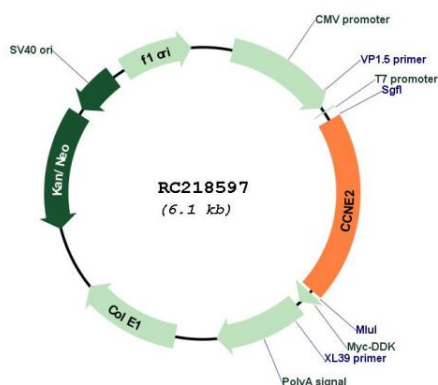
Protein Families: Druggable Genome

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

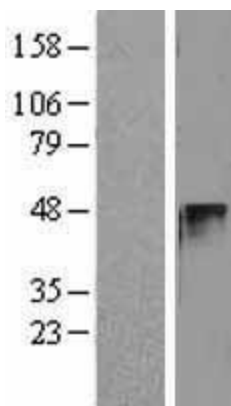
MW: 46.6 kDa

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. This cyclin has been shown to specifically interact with CIP/KIP family of CDK inhibitors, and plays a role in cell cycle G1/S transition. The expression of this gene peaks at the G1-S phase and exhibits a pattern of tissue specificity distinct from that of cyclin E1. A significantly increased expression level of this gene was observed in tumor-derived cells. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC218597



Western blot validation of overexpression lysate (Cat# [LY403299]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC218597 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).