

Product datasheet for RC217068

Cyclin G2 (CCNG2) (NM_004354) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cyclin G2 (CCNG2) (NM_004354) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cyclin G2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC217068 representing NM_004354 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAAGGATTTGGGGCAGAGCACTTGGCAGGTCATGAAGGGTCCAACCTCTCGGGTTGTTGAACGTCT
ACCTGGAACAAGAAGAGAGATCCAACTCGAGAAAAAGGGCTGAGTTTGATTGAGGCTACCCCGGAGAA
TGATAACACTTTGTGCCAGGATTGAGAAATGCCAAAGTTGAAGATTTAAGGAGTTTAGCCAACCTTTTT
GGATCTTGCACTGAACTTTTGCCTGGCTGCAATATTTGGACAGGTTCTTGGCTCTTATGAAGGTGA
AACCTAAACATTTGCTTGCATTGGAGTCTGTTCTTTTTGCTGGCTGCTAGAATAGTTGAAGAAGACTG
CAATATCCATCCACTCATGATGTGATCCGGATTAGTCAGTGAAATGTAAGTCTTCTGACATAAAACGG
ATGAAAAAATAATTTAGAAAAATGCACTATGAATTGGAAGCTACTACTGCCTTAAACTTTTTGCACT
TATACCATACTATTATACTTTGCATACCTCAGAAAGGAAAGAAATACTGAGCCTTGATAAACTAGAAGC
TCAGCTGAAAGCTTGCACTGCCGACTCATTTTTCAAAGCAAACCATCTGTATTAGCCTTGTGCCTT
CTCAATTTGGAAGTGAAACTTTGAAATCTGTTGAATTACTGGAATTCTCTTGCTAGTTAAAAACATT
CCAAGATTAATGACTGAGTCTTCTACTGGAGAGAGTTGGTTTCTAAATGCCTAGCCGAGTATTCTTC
TCCTGAATGTTGCAAACAGATCTTAAGAAGTTGGTTGGATCGTTTCAAGGCGCACAGCCAGAACCTC
CACAACAGCTACTATAGTGTCTGAGCTGCCAACGATACCTGAGGGGGTTGTTTTGATGAAAGTGAAA
GTGAGGACTCTTGTGAAGATATGAGTTGTGGAGAGGAGAGTCTCAGCAGCTCTCCTCCAGTGATCAAGA
GTGCACCTTCTTTTTCAACTTCAAAGTGGCACAACACTGTGCTTTCATCT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

Protein Sequence: >RC217068 representing NM_004354
Red=Cloning site Green=Tags(s)

MKDLGAEHLGHEGVQLLGLLNVYLEQEERFQPREKGLSLIEATPENDNTLCPGLRNAKVEDLRSLANFF
 GSCTETFLAVNILDRLALMKVKPKHLSCIGVCSFLLAARIVEEDCNIPSTHDVIRISQCKCTASDIKR
 MEKIISEKLHYELEATTALNFLHLYHTIILCHTSERKEILSLDKLEAQLKACNCRILFSKAKPSVLALCL
 LNLEVETLKSVELLEIILLVKKHSHKINDTEFFYWRELVSKCLAEYSSPECCKPDLKKLWIVSRRTAQN
 HNSYYSVPELPTIPEGGCFDESESESDSCEDMSCGEEESLSSPPSDQECTFFNFKVAQTLCFPS

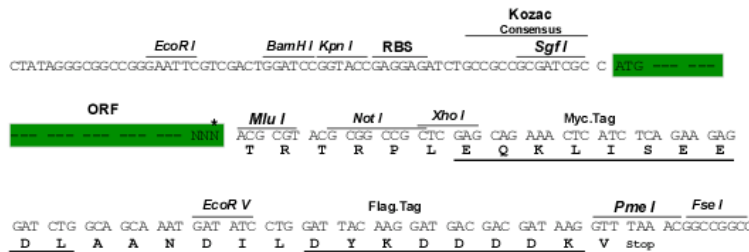
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6157_g04.zip

Restriction Sites: Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_004354

ORF Size: 1032 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_004354.3](#)

RefSeq Size: 2044 bp

RefSeq ORF: 1035 bp

Locus ID: 901

UniProt ID: [Q16589](#)

Cytogenetics: 4q21.1

Domains: CYCLIN, cyclin

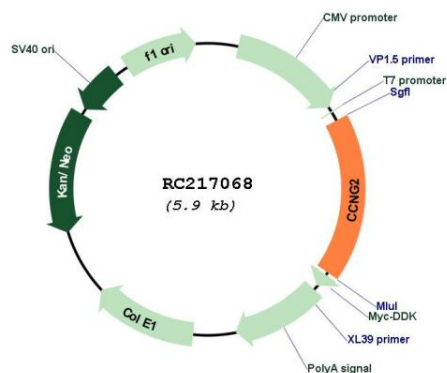
Protein Families: Druggable Genome

Protein Pathways: p53 signaling pathway

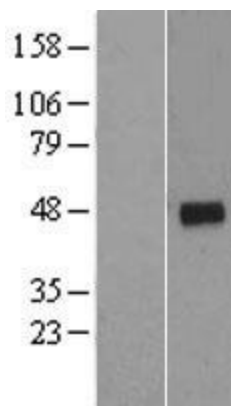
MW: 38.7 kDa

Gene Summary: The eukaryotic cell cycle is governed by cyclin-dependent protein kinases (CDKs) whose activities are regulated by cyclins and CDK inhibitors. The 8 species of cyclins reported in mammals, cyclins A through H, share a conserved amino acid sequence of about 90 residues called the cyclin box. The amino acid sequence of cyclin G is well conserved among mammals. The nucleotide sequence of cyclin G1 and cyclin G2 are 53% identical. Unlike cyclin G1, cyclin G2 contains a C-terminal PEST protein destabilization motif, suggesting that cyclin G2 expression is tightly regulated through the cell cycle. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC217068



Western blot validation of overexpression lysate (Cat# [LY401388]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC217068 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).