

## Product datasheet for **SC117452**

### Cyclin G2 (CCNG2) (NM\_004354) Human Untagged Clone

#### Product data:

|                           |   |
|---------------------------|---|
| Product Type:             | Expression Plasmids   |
| Product Name:             | Cyclin G2 (CCNG2) (NM_004354) Human Untagged Clone  |
| Tag:                      | Tag Free  |
| Symbol:                   | Cyclin G2   |
| Mammalian Cell Selection: | None  |
| Vector:                   | <u>pCMV6-XL5</u>  |
| E. coli Selection:        | Ampicillin (100 ug/mL)  |
| Fully Sequenced ORF:      | >OriGene ORF within SC117452 sequence for NM_004354 edited (data generated by NextGen Sequencing) |

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ATGAAGGATTTGGGGCAGAGCACTTGGCAGGTCATGAAGGGTCCAACCTCTCGGTTG
TTGAACGTCTACCTGGAACAAGAAGAGAGATTCCAACCTCGAGAAAAGGGCTGAGTTT
ATTGAGGCTACCCCGGAGAATGATAACACTTTGTGTCCAGGATTGAGAAATGCCAAAGT
GAAGATTTAAGGAGTTTAGCCAACCTTTTTGGATCTTGCACTGAAACTTTTGTCTGGCT
GTCAATATTTGGACAGGTTCTTGGCTCTTATGAAGGTGAAACCTAAACATTTGTCTTGC
ATTGGAGTCTGTTCTTTTTGCTGGCTGCTAGAATAGTTGAAGAAGACTGCAATATTCCA
TCCACTCATGATGTGATCCGGATTAGTCAGTGTAATGTACTGCTTCTGACATAAAACGG
ATGGAAAAATAATTTAGAAAAATGCACTATGAATTGGAAGCTACTACTGCCTAAAC
TTTTTGCACCTTATACCATACTATTATACTTTGTCATACTTCAGAAAGGAAAGAAACTG
AGCCTTGATAAACTAGAAGCTCAGCTGAAAGCTTCAACTGCCGACTCATCTTTTCAAAA
GCAAAACCATCTGTATTAGCCTTGTGCCTTCTCAATTTGGAAGTGAAACTTTGAAATCT
GTTGAATTACTGGAAATCTCTTGTAGTTAAAAAACATTCCAAGATTAATGCACTGAG
TTCTTCTACTGGAGAGAGTTGGTTTCTAAATGCCTAGCCGAGTATTCTTCTCCTGAATGT
TGCAAACAGATCTTAAGAAGTTGGTTTGGATCGTTTCAAGGCGCACAGCCAGAACCTC
CACAAACAGCTACTATAGTGTTCCTGAGCTGCCAACGATACCTGAGGGGGTGTGTTTGT
GAAAGTAAAGTGAGGACTCTTGTGAAGATATGAGTTGTGGAGAGGAGAGTCTCAGCAGC
TCTCTCCAGTGATCAAGAGTGCACCTTCTTTTCAACTCAAAGTGGCACAAACACTG
TGCTTTCCATCTTAG

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Clone variation with respect to NM\_004354.2



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**5' Read Nucleotide Sequence:**

>OriGene 5' read for NM\_004354 unedited  
AACATTTGTATACGACTCACTATAGGCGGCCCGGAATTCGCACGAGGGTCCGGATGCCGG  
ACCGGGGGCACCCTGAGGCGGTGGGTCCCCGACCTGCGAGACAGGTTTGGAAAGCCCCCG  
CTGCGCCAGTCCGTGCGGACCGCGAGGCCGCGGGCGGGTGGAGGCGCGTCTCCGGCAGC  
ATGAAGGATTTGGGGCAGAGCACTTGGCAGGTCATGAAGGGTCCAACCTCTCGGGTTG  
ATTGAGGCTACCTGGAACAAGAAGAGATTCCAACCTCGAGAAAAAGGGCTGAGTTTG  
GAAGATTTAAGGAGTTTAGCCAACTTTTTTGGATCTTGCACTGAAACCTTTTGCCTGGCT  
GTCAATATTTTGACAGGTTCTTGGCTCTTATGAAGGTGAAACCTAAACATTTGTCTTG  
ATTGGAGTCTGTTCTTTTTTGTGGCTGCTAGAATAGTTGAAGAAGACTGCAATATTCCA  
TCCACTCATGATGTGATCCGGATTAGTCAGTGTAAATGTACTGCTTCTGACATAAAACGG  
ATGAAAAAATAATTTAGAAAAATTGCACTATGAATTGGAAGCTACTACTGCCTTANAC  
TTTNTGCACCTTATACCATACTATTATACTTTGNNCATACTTCAAGAAAGGAAAGAAATACC  
TGAGCCTTGATAAACTAGAAGCTCAGCTGANAGCTTNGCACTGCCGACTCATCTTTCAA  
AGCAAACCATCTGTATTAGCCTTGTGCCTTCTCATNNTGGAGTGGGAACCTTTGAATCTG  
TTGAATACTGGNAATTCTTGTCTANTAANA

**3' Read Nucleotide Sequence:**

>OriGene 3' read for NM\_004354 unedited  
GTACGCGGCCGAATCTAGAGTCGAGCCCTTTTTTTTTTTTTTTTTTTTTTTTGTAGAAT  
TCATTAATAATTTTATTTTGAATTACAATCTATTATCACTTCAAAAAGAGCCACTTCAGA  
AAACATTTCAACGGATGTTGACTTACCAGTAAAAATGTAAGTCATCAATGTATGATTTATA  
CTACAGAATACATAATAAATTATTTACATGCAATGACTAGACTATCACACACAAGGGA  
AAAAATACAGCATTTTATGTACATTTTAAAAGATTTACATGTTTCATATACAATTTATAA  
AGTTAAAAATNTTTGTACAAAATCTTACATGTACAGAGTTTATATAAGCCCCATTCTTA  
TGGCTGTATACCACACAGATTTGCTTAAAACCTATAACTACAAACACTCGGGTCTTTT  
ATATTCATCTTGGCACCCATATAGCAATACACTATTCTGAAATGCAAATTACAAAGGAA  
ATAAAATGTAATCATGCAGACATTTTTTAAATAAGAAAATGCGATAAAATATACCTACA  
CCAGATCAACATTTATCAATCCCATAGACACTGAGTTTTCAACTTACTGCACTGTTTTCA  
TACTAGTCCCTGCAAACTAGCAGATTATGGATTTTTAAACGAACACTTAAAATAATTCC  
CCTATTTTTGACAATACCTGGGCCATTAGGCAATGAAACCTAAAAGCCCTTACCCAATTA  
TTTCTTGCCTTAACCAGAAATNTTTATTTAAGACTTCCCTCATTTANAAGACCGGCATG  
TGCCACATTATAATTTCCAATTTTTAAGATATTGGTTACCATCAAAAAACTGATTATTT  
AAAAAACACACCACAGGGTTTGAATTTAAGACCTACTCACTTTTTGTAAGGGGGCA  
GGTGAATCTGTATACCCTTCGATTTCCCTGCTGGTAGAAGACTTGACCTCAACTGCT  
AAAAATTTGAAGTTTTAAGCTACAAACCC

**Restriction Sites:**

NotI-NotI

**ACCN:**

NM\_004354

**Insert Size:**

2560 bp

**OTI Disclaimer:**

Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

**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\\_004354.1](#), [NP\\_004345.1](#)

**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

**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]