

## Product datasheet for **SC106758**

### Cyclin B1 (CCNB1) (NM\_031966) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Cyclin B1 (CCNB1) (NM_031966) Human Untagged Clone
Tag:	Tag Free
Symbol:	Cyclin B1
Synonyms:	CCNB
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC106758 sequence for NM_031966 edited (data generated by NextGen Sequencing)

```

ATGGCGCTCCGATCACCAGGAAGTCCGAAAATTAATGCTGAAAATAAGGCGAAGATCAAC
ATGGCAGGCGCAAAGCGGTTCCCTACGGCCCTGCTGCAACCTCCAAGCCGGACTGAGG
CCAAGAACAGCTCTTGGGACATTGGTAACAAAGTCAGTGAACAAGTGCAGGCCAAAATG
CCTATGAAGAAGGAAGCAAAACCTTCAGCTACTGGAAAAGTCATTGATAAAAACTACCA
AAACCTCTTAAAAGGTACCTATGCTGGTGCCAGTGCCAGTGTCTGAGCCAGTGCCAGAG
CCAGAACCTGAGCCAGAACCTGAGCCTGTAAAGAAGAAAAAATTTGCGCTGAGCCTATT
TTGGTTGATACTGCCTCTCCAAGCCCAATGAAACATCTGGATGTCCCTGCAGAAGAA
GACCTGTGTGAGGCTTTCTGTGTAATTCTTGCAGTAAATGATGTGGATGCAGAAGAT
GGAGCTGATCCAACCTTTGTAGTGAATATGTGAAAGATATTTATGCTTATCTGAGACAA
CTTGAGGAAGAGCAAGCAGTCAGACCAAAATACCTACTGGGTCGGGAAGTCACTGGAAC
ATGAGAGCCATCCTAATTGACTGGCTAGTACAGGTTCAAATGAAATTCAGGTTGTTGCAG
GAGACCATGTACATGACTGTCTCCATTATTGATCGGTTTCATGCAGAATAATTGTGTGCC
AAGAAGATGCTGCAGCTGGTGGTGTCACTGCCATGTTTATTGCAAGCAAAATATGAAGAA
ATGTACCCTCCAGAAATGGTGACTTTGCTTTTGTGACTGACAACACTTATACTAAGCAC
CAAATCAGACAGATGAAATGAAGATTCTAAGAGCTTTAACTTTGGTCTGGGTCGGCCT
CTACCTTTGCACTTCCTTCGGAGAGCATCTAAGATTGGAGAGGTTGATGTCGAGCAACAT
ACTTTGGCCAAAATACCTGATGGAACCTAATGTTGGACTATGACATGGTGCACCTTCCT
CCTTCTCAAATTGCAGCAGGAGCTTTTTGCTTAGCACTGAAAATCTGGATAATGGTGAA
TGGACACCAACTCTACAACATTACCTGTATATACTGAAGAATCTCTTCTCCAGTTATG
CAGCACCTGGCTAAGAATGTAGTCATGGTAAATCAAGGACTTACAAAGCACATGACTGTC
AAGAACAAGTATGCCACATCGAAGCATGCTAAGATCAGCACTCTACCACAGCTGAATTCT
GCACTAGTTCAAGATTTAGCCAAGGCTGTGGCAAAGGTGTAA

```

Clone variation with respect to NM\_031966.2



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**5' Read Nucleotide Sequence:**

```
>OriGene 5' read for NM_031966 unedited
CAGATTTGTATACGACNACTATAGGCGGCACGCGAATTCGCACGAGTTGGTTTTCTGCTGG
GTGTAAGTCCCTTGGCTGGTCGGGCTCCGGTGTCTGCTTCTCCCGCTGAGCTGCTGCC
TGGTGAATAGGAAGCCATGGCGCTCCGAGTCACCAGGAACCGAAAAATTAATGCCTGAAA
ATAAGGCGAAGATCAACATGGCAGGCGCAAAGCGCTTCTACGGCCCTGCTGCAACCT
CCAAGCCCGGACTGAGGCCAAGAACAGCTCTTGGGGACATTGGTAACAAAGTCAGTGAAC
AACTGCAGGCCAAAATGCCTATGAAGAAAAGAAGCAAACCTTCAGCTACTGGAAAAGTCA
TTGATAAAAAAATACCAAACCTCTTGAAAAGGTACCTATGCTGGTGCCAGTGCCAGTGT
CTGATCCAGTGCCAGATCCAGAACCTGAGCCAGAACCTGAGCCTGTTAAAGAAGAAAAAC
TTTTCGCTGAGCCTATTTTGGTTGATACTGCCTCTCCAAGCCCAATGGAAACATCTGGAT
GTGCCCTGCAGAAGAAGACCTGTGTCAAGCTTCTCTGATGTAATTCTTGACGTAATG
ATGTGGATGCAGAAGATGGAGCTGATCCAAACCTTGTAGAGAATATGTGAAAGATATTT
ATGCTTATCTGAGACAACTTGAGGAAGATCAAGCAGTCAGACCAAATACCTACTGGGTC
GGGAAGTCACTGGATACATGAGAGCCATCCTAATTGACTGGCTAGTACAGTTCAAATGA
AATTCAAGTTGTTGCAAGAGACCATGTACATGACTGTCTNCTTATAGATCGGTTTCATGCA
GAATAATTGTGTGCCATAATAGCTGCAGCTGGNTANAGTCACTGCATGTTTATTGCATG
CAATATGAGATATGTCCCTNCANAATAGAGACTTGCTTTTGTGACGACACACTGTACTAT
GCACAATCAGAAGAG
```

**3' Read Nucleotide Sequence:**

```
>OriGene 3' read for NM_031966 unedited
NGGGGAATTACTGTGNNACCGCGCCGCTTNCNTAGNGATCGGTTTTTTTTTTTTTTTTTTTT
TTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTACAGATGGCACATGGGGCAATTTTATTTGGAA
ATATAGTACTCCAACCAAGTTTACAAGTTACACCTTTGCCACAGCCTTGGCTAAATCTT
GAACTAGTGCAAAATTCAGCTGGGGTAGAGGGCTGATCTTAGCATGCTTCGATGGGGCAT
ACTTGTTCTTGACAGTCATGTGCTTTGTAAGTCCTTGATTTACCATGACTACATTCTTAG
CCAGGTGCTGCATAACTGGAAAAAAAATTTCTCAGTATATGACAGGTAATGTTGTAAGG
TTGGTGTCCATTACCATTATCCAGAAATTTTCAAGTCTAAGCAAAAAGCTCCTGTGCAA
TTTGAGAAGGAGGAAAGTGCACCATGTCATAGTCCAACATAGTTAGTCCATCAGGTATT
TGGCCAAAGTATGTTGCTCGACATCAACCTCTCCAATCTTAGATGCTCTCCGAAGGAAGT
GCAAAGGTAGAGGCCGACCCAGACCAAAGTTTAAAGCTTTAGAATCTTCATTTCCATCT
GTCTGATTTGGTGTCTTAGTATAAGTGTGGCAGTCACAAAAGCAAAGTCACCAATTTCTG
GAGGGTACATTTCTCAATATTGCTTGGCATAAACATGGCAGTGACACCCAACAGCTGCA
GCATCTTTTTGGGCACACAATTATTCTGGATGAACCGATCAATAATGGAGAACAGTCTGT
ACATGGTCTCCTGCAACAACCTGGAATTTCAATTTGACCTGGCCTAGCCAGTCCATTAA
GATGGCTCTCATGGTTCCAGGGCCTTCCGGACCCAAGGGATTTTGGCCTGACGG
```

**Restriction Sites:**

NotI-NotI

**ACCN:**

NM\_031966

**Insert Size:**

1500 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

**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\\_031966.2](#), [NP\\_114172.1](#)

**RefSeq Size:** 2101 bp

**RefSeq ORF:** 1302 bp

**Locus ID:** 891

**UniProt ID:** [P14635](#)

**Cytogenetics:** 5q13.2

**Domains:** cyclin\_C, CYCLIN, cyclin

**Protein Families:** Druggable Genome, Stem cell - Pluripotency

**Protein Pathways:** Cell cycle, Oocyte meiosis, p53 signaling pathway, Progesterone-mediated oocyte maturation

**Gene Summary:** The protein encoded by this gene is a regulatory protein involved in mitosis. The gene product complexes with p34(cdc2) to form the maturation-promoting factor (MPF). The encoded protein is necessary for proper control of the G2/M transition phase of the cell cycle. [provided by RefSeq, Aug 2017]  
Transcript Variant: This variant (1) represents the longest transcript and encodes the longest isoform (1).