

## Product datasheet for **SC110710**

### Cyclin B3 (CCNB3) (NM\_033670) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Cyclin B3 (CCNB3) (NM_033670) Human Untagged Clone
Tag:	Tag Free
Symbol:	Cyclin B3
Synonyms:	CYCB3
Mammalian Cell Selection:	Neomycin
Vector:	<u>PCMV6-Neo</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_033670, the custom clone sequence may differ by one or more nucleotides

```
ATGCTACTGCCACTACCACCCAGAGCTCCAAACCTGTGCCAAGAAATCTCAGTCCAGCAAAATTGTGC
CCAGTCATCATGACCCATCTGAAAAGACGGGGAGAATTGCCAAACGAAGATATCTCCATCTTCACTTCA
GGAGTCTCCATCTTCACTTCAGGGAGCACTCAAAAAGAGATCAGCTTTTGAAGATCTCCTAATGTGTCC
TTTGAGATGACCCATGAGACCCTGTAAGTGGCAGTGAAGCTGGTGGATCTCTACCTAATGAAGGCAGTAT
GCAAGAAGGATAAGTTACAACCTCTTGGTGCCACTGCCTTTATGATTGCAGCAAAATTTGAGGAGCACA
CTCACCTCGTGTGGATGACTTTGTGTACATCTGTGATGATAATTATCAGCGATCTGAGGACTCAGCATG
GAAATCAACATCCTGAACGTCTCAAATGTGACATTAACATTCCCATCGCCTACCATTTTCTGCGCAGAT
ATGCTAGGTGTATCCACACCAACATGAAGACACTGACCTTGTCCCCTACATCTGCGAGATGACCCTGCA
GGAATACCACTATGTCCAGGAGAAGGCTTCCAAGCTAGCTGCTGCCTCCTTACTCCTGGCCCTCTACATG
AAGAAGCTCGGATACTGGGTTCCCTTCCCTGGAGCATTACAGTGGCTACAGTATCTCTGAGCTTACCCTT
TGGTCAGACAGCTGAACAACTGCTGACTTTCAGTTCTTACGATAGTCTCAAGGCTGTGTATTACAAGTA
TTCTCACCCGGTCTTCTTTGAAGTCGCCAAAATCCCTGCCTTGGATATGTTGAAGCTGGAGGAGATTTTG
AACTGTGATTGTGAGGCTCAGGGCTGGTACTCTAG
```

Restriction Sites:	NotI-NotI
ACCN:	NM_033670
Insert Size:	2650 bp



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**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\\_033670.1](#), [NP\\_391990.1](#)

**RefSeq Size:** 1212 bp

**RefSeq ORF:** 1212 bp

**Locus ID:** 85417

**UniProt ID:** [Q8WWL7](#)

**Cytogenetics:** Xp11.22

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

**Protein Families:** Druggable Genome

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

**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 positive regulators of cyclin-dependent kinases (CDKs), and thereby play an essential role in the control of the cell cycle. Different cyclins exhibit distinct expression and degradation patterns, which contribute to the temporal coordination of each mitotic event. Studies of similar genes in chicken and drosophila suggest that this cyclin may associate with CDC2 and CDK2 kinases, and may be required for proper spindle reorganization and restoration of the interphase nucleus. Alternatively spliced transcript variants encoding different isoforms have been described for this gene. [provided by RefSeq, Oct 2011]

Transcript Variant: This variant (1) lacks four consecutive in-frame coding exons compared to variant 3. This results in a shorter isoform (1) missing a 1104 aa internal protein segment compared to isoform 3.