

Product datasheet for **RG211260**

Cyclin B2 (CCNB2) (NM_004701) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cyclin B2 (CCNB2) (NM_004701) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Cyclin B2
Synonyms:	HsT17299
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG211260 representing NM_004701 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGCTGCTCCGACGCCCGACGGTGTCCAGTGATTTGGAGAATATTGACACAGGAGTTAATTCTAAAG
TTAAGAGTCATGTGACTATTAGGCGAAGTGTCTTTAGAAGAAATTGGAAATAGAGTTACAACCAGAGCAGC
ACAAGTAGCTAAGAAAGCTCAGAACACCAAAGTCCAGTTCACCCACAAAACAACAAATGTCAACAAA
CAACTGAAACCTACTGCTTCTGTCAAACAGTACAGATGGAAAAGTTGGCTCAAAGGGTCTTCTCCCA
CACCTGAGGATGTCTCCATGAAGGAAGAGAATCTCTGCCAAGCTTTTTCTGATGCCTTGCTGCAAAAT
CGAGGACATTGATAACGAAGATTGGGAGAACCCTCAGCTCTGCAGTGACTACGTTAAGGATATCTATCAG
TATCTCAGGCAGCTGGAGGTTTTGCAGTCCATAAACCCACATTTCTTAGATGGAAGAGATATAAATGGAC
GCATGCGTGCCATCCTAGTGGATTGGCTGGTACAAGTCCACTCCAAGTTTAGGCTTCTGCAGGAGACTCT
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GTTGGGATTACTGCTCTGCTCTTGGCTTCCAAGTATGAGGAGATGTTTTCTCAAATATTGAAGACTTTG
TAAATTTGAGTTGGGTCGACCCCTGGCACTACACTTCTTAAGGCGAGCATCAAAGCCGGGAGGTTGAT
GTTGAACAGCACACTTTAGCCAAGTATTTGATGGAGCTGACTCTCATCGACTATGATATGGTGCATTATC
ATCCTTCTAAGGTAGCAGCAGCTGCTTCCCTGCTTGTCTCAGAAGTTCTAGGACAAGGAAAATGGAACCT
AAAGCAGCAGTATTACACAGGATACACAGAGAATGAAGTATTGGAAGTCATGCAGCACATGGCCAAGAAT
GTGGTGAAGTAAATGAAAACCTAACTAAATTCATCGCCATCAAGAATAAGTATGCAAGCAGCAAACCTCC
TGAAGATCAGCATGATCCCTCAGCTGAACCTCAAAGCCGTCAAAGACCTTGCTCCCCACTGATAGGAAG
GTCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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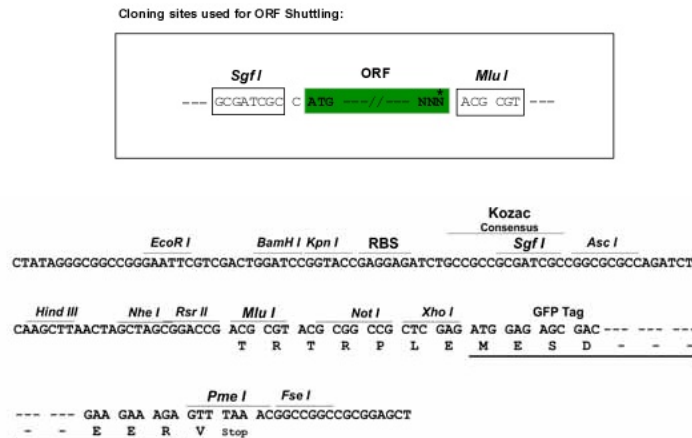
Protein Sequence: >RG211260 representing NM_004701
 Red=Cloning site Green=Tags(s)

MALLRRPTVSSDLENIDTGVNSKVKSHVTIRRTVLEEIGNRVTTTRAAQVAKKAQNTKVPVQPTKTTNVNK
 QLKPTASVKPVQMEKLAPKGPSPTEPDMKEENLCQAFSDALLCKIEDIDNEDWENPQLCSDYVKDIYQ
 YLRQLEVLQSIINPHFLDGRDINGRMRAILVDWL VQVHSKFRLLQETLYMCGVIMDRFLQVQPVSRKKLQL
 VGITALLLASKYEEMFSPNIEDFVYITDNAYTSSQIREMETLILKELKELGRPLPLHFLRRASKAGEVD
 VEQHTLAKYLMELTLIDYDMVHYHPSKVAAAASCLSQKVLGQGKWNLKQYYTGYTENEVLEVMQHMAKN
 VYKVNENLTKFIAIKNKYASSKLLKISMIPQLNSKAVKDLASPLIGRS

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_004701

ORF Size: 1194 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_004701.4](#)

RefSeq Size: 1530 bp

RefSeq ORF: 1197 bp

Locus ID: 9133

UniProt ID: [O95067](#)

Cytogenetics: 15q22.2

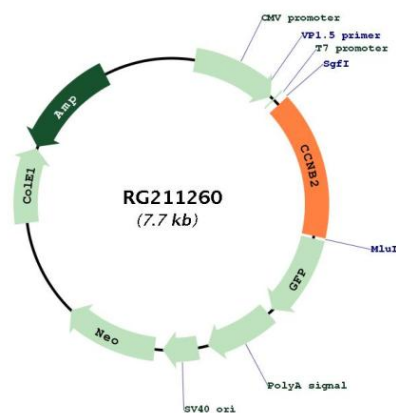
Domains: cyclin_C, CYCLIN, cyclin

Protein Families: Druggable Genome, Stem cell - Pluripotency

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

Gene Summary: Cyclin B2 is a member of the cyclin family, specifically the B-type cyclins. The B-type cyclins, B1 and B2, associate with p34cdc2 and are essential components of the cell cycle regulatory machinery. B1 and B2 differ in their subcellular localization. Cyclin B1 co-localizes with microtubules, whereas cyclin B2 is primarily associated with the Golgi region. Cyclin B2 also binds to transforming growth factor beta RII and thus cyclin B2/cdc2 may play a key role in transforming growth factor beta-mediated cell cycle control. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG211260