

## Product datasheet for **MG204013**

### Ccnd3 (NM\_007632) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Ccnd3 (NM_007632) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Ccnd3
Synonyms:	9230106B05Rik; AA682053; AL024085; AW146355; C78795
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG204013 representing NM_007632 Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTGAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGC**

ATGGAGCTGCTGTGTTCGAGGGCACCCGGCACGCGCCCCGGGCCGGCCCGACCCGCGGCTGCTTGGG  
 ACCAGCGTGCTCTGCAGAGTTTACTCCGCCTGGAGGAGCGCTACGTGCCGCGAGCCTCTACTTCCAGT  
 CGTGCAAAGGAGATCAAGCCGCACATGCGGAAGATGCTGGCATACTGGATGCTGGAGGTGTGTGAGGAG  
 CAGCGCTGCGAGGAGGATGTCTCCCTCTGGCTATGAACCTACCTGGATCGCTACCTGTCTGCGTCCCCA  
 CCCGAAAGGCGCAATTGCAGCTTCTAGGTACTGTCTGCCTGTTGCTGGCCTCCAAGCTGCGCGAAACCAC  
 GCCCTGACTATTGAGAAAGCTTTGCATCTATACGACCAGGCTGTGGCTCCATGGCAGTTGCGGGAGTGG  
 GAGGTGCTGGTCTGGGGAAGCTCAAGTGGGACCTGGCTGCTGTGATTGCGCACGACTTCTGGCCTTGA  
 TTCTGCACCGCCTGTCTCTGCCAGTGACCGGCAGGCTTTGGTCAAAAAGCATGCCAGACCTTTTGGC  
 CCTCTGTGCTACAGATTACACCTTTGCGATGTATCCTCCATCCATGATCGCCACAGGCAGCATTGGGGCA  
 GCCGTGCTAGGCCTAGGCGCCTGCTCTATGTCTGCGGATGAGCTCACAGAGTTGCTGGCCGGGATCACAG  
 GCACTGAAGTGGACTACCTGCGAGCCTGCCAGGAACAGATCGAAGCTGCCCTCAGGGAGAGCCTCAGGGA  
 AGCTGCTCAGACAGCCCCAGCCAGTGCCCAAAGCCCCCGGGGCTCTAGTAGCCAGGGGCCAGTCAG  
 ACCAGCACTCCACAGATGTCACAGCCATTACCTG

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA


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**Protein Sequence:** >MG204013 representing NM\_007632  
 Red=Cloning site Green=Tags(s)

MELLCCGTRHAPRAGDPRLLDQQRVLQSLRLLEERYVPRASYFQCVQKEIKPHMRKMLAYWMLEVCEE  
 QRCEEDVFPLAMNYLDRLSCVPTRKAQLQLLGTVCLLASKLRETTPLTIEKLCIYTDQAVAPWQLREW  
 EVLVLGKWKDLAAVIAHDFLALILHRLSLPSDRQALVKKHAQTFALCATDYTFAMYPSPMIATGSIGA  
 AVLGLGACMSADEL TELLAGITGTEVDYLACQEQIEAALRESLREAAQTAPSPVPKAPRGSSSQGPSQ  
 TSTPTDVTAIHL

TRTRPLE – GFP Tag – V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_007632

**ORF Size:** 876 bp

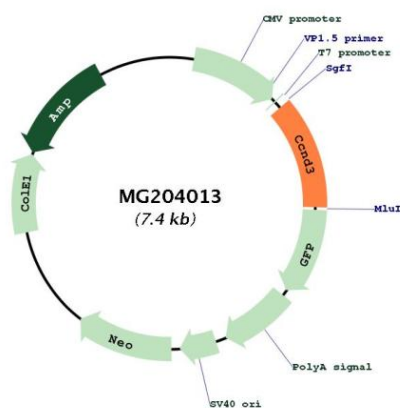
**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of 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](#)

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<a href="#">NM_007632.2</a> , <a href="#">NP_031658.1</a>
<b>RefSeq Size:</b>	1992 bp
<b>RefSeq ORF:</b>	879 bp
<b>Locus ID:</b>	12445
<b>UniProt ID:</b>	<a href="#">P30282</a>
<b>Cytogenetics:</b>	17 23.37 cM
<b>Gene Summary:</b>	Regulatory component of the cyclin D3-CDK4 (DC) complex that phosphorylates and inhibits members of the retinoblastoma (RB) protein family including RB1 and regulates the cell-cycle during G(1)/S transition. Phosphorylation of RB1 allows dissociation of the transcription factor E2F from the RB/E2F complex and the subsequent transcription of E2F target genes which are responsible for the progression through the G(1) phase. Hypophosphorylates RB1 in early G(1) phase. Cyclin D-CDK4 complexes are major integrators of various mitogenic and antimitogenic signals. Also substrate for SMAD3, phosphorylating SMAD3 in a cell-cycle-dependent manner and repressing its transcriptional activity. Component of the ternary complex, cyclin D3/CDK4/CDKN1B, required for nuclear translocation and activity of the cyclin D-CDK4 complex.[UniProtKB/Swiss-Prot Function]

## Product images:



Circular map for MG204013