

## Product datasheet for **RC202437**

### Cyclin D3 (CCND3) (NM\_001760) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Cyclin D3 (CCND3) (NM_001760) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cyclin D3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC202437 representing NM_001760 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGAGCTGCTGTGTTCGAAGGCACCCGGCACGCGCCCCGGGCCGGCCGGACCCGCGGCTGCTGGGG  
 ACCAGCGTGCTCTGCAGAGCCTGCTCCGCCTGGAGGAGCGCTACGTACCCCGCGCCTCTACTTCCAGTG  
 CGTGCAGCGGGAGATCAAGCCGCACATGCGGAAGATGCTGGCTTACTGGATGCTGGAGGTATGTGAGGAG  
 CAGCGCTGTGAGGAGGAAGTCTTCCCCCTGGCCATGAACCTACCTGGATCGCTACCTGTCTTTCGTCCTCCCA  
 CCGAAAGGCGCAGTTGCAGCTCCTGGGTGCGGTCTGCATGCTGCTGGCCTCCAAGCTGCGCGAGACCAC  
 GCCCTGACCATCGAAAACTGTGCATCTACACCGACCAGCTGTCTCTCCCGCCAGTTGCGGGACTGG  
 GAGGTGCTGGTCTAGGGAAGCTCAAGTGGGACCTGGCTGCTGTGATTGCACATGATTTCTGGCCTTCA  
 TTCTGCACCGGCTCTCTGCCCCGTGACCGACAGGCCTTGGTCAAAAAGCATGCCAGACCTTTTGGC  
 CCTCTGTGCTACAGATTATACCTTTGCCATGTACCCGCCATCCATGATCGCCACGGGCAGCATTGGGGCT  
 GCAGTGCAAGGCCTGGGTGCCTGCTCCATGTCCGGGATGAGCTCACAGAGCTGCTGGCAGGGATCACTG  
 GCACTGAAGTGGACTGCCTGCGGCCTGTGAGGAGCAGATCGAAGCTGCACTCAGGGAGAGCCTCAGGGA  
 AGCCTCTCAGACCAGCTCCAGCCAGCGCCAAAGCCCCCGGGCTCCAGCAGCAAGGGCCAGCCAG  
 ACCAGCACTCTACAGATGTCACAGCCATACACCTG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA


[View online »](#)

**Protein Sequence:** >RC202437 representing NM\_001760  
 Red=Cloning site Green=Tags(s)

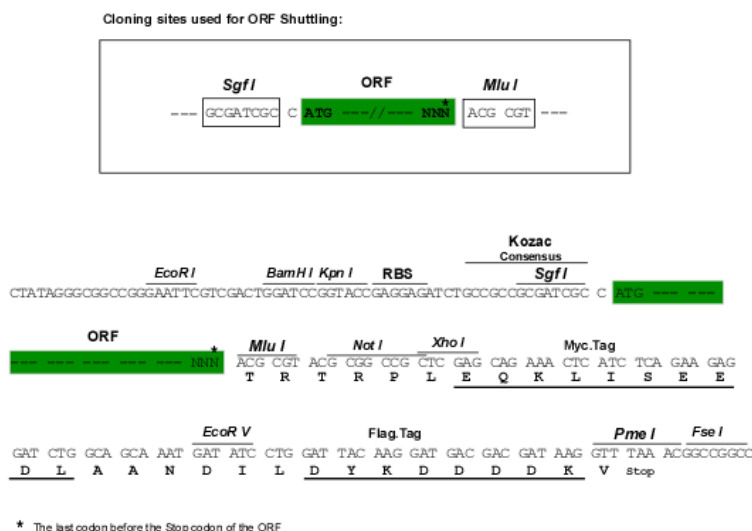
MELLCCGTRHAPRAGDPRLGQRLVLSLLRLEERYVPRASYFQCVQREIKPHMRKMLAYWMLEVCEE  
 QRCEEEVFPLAMNYLDLYLSCVPTRKAQLQLLGAVCMMLASKLRETTPLTIEKLCIYTDHAVSPRQLRDW  
 EVLVLGKWKDLAAVIAHDFLAFILHRLSLPRDRQALVKKHAQTFLALCATDYTFAMYPSPMIATGSIGA  
 AVQGLGACSMGDELTELLAGITGTEVDCLRACQEQIEAALRESLREASQTSSSPAPKAPRGSSSQGPSQ  
 TSTPTDVTAIHL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mg2413\\_c08.zip](https://cdn.origene.com/chromatograms/mg2413_c08.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001760

**ORF Size:** 876 bp

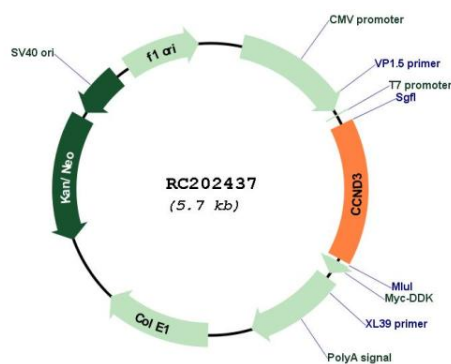
**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone 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.

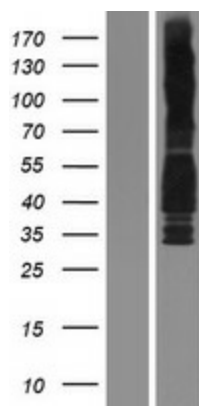
**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

<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>RefSeq:</b>	<u>NM_001760.5</u>
<b>RefSeq Size:</b>	2095 bp
<b>RefSeq ORF:</b>	879 bp
<b>Locus ID:</b>	896
<b>UniProt ID:</b>	<u>P30281</u>
<b>Cytogenetics:</b>	6p21.1
<b>Domains:</b>	cyclin_C, CYCLIN, cyclin
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Cell cycle, Focal adhesion, Jak-STAT signaling pathway, p53 signaling pathway, Wnt signaling pathway
<b>MW:</b>	32.3 kDa
<b>Gene Summary:</b>	<p>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 regulators of CDK kinases. Different cyclins exhibit distinct expression and degradation patterns which contribute to the temporal coordination of each mitotic event. This cyclin forms a complex with and functions as a regulatory subunit of CDK4 or CDK6, whose activity is required for cell cycle G1/S transition. This protein has been shown to interact with and be involved in the phosphorylation of tumor suppressor protein Rb. The CDK4 activity associated with this cyclin was reported to be necessary for cell cycle progression through G2 phase into mitosis after UV radiation. Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Oct 2008]</p>

## Product images:



Circular map for RC202437



Western blot validation of overexpression lysate (Cat# [LY400666]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202437 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).