

Product datasheet for **RG227101**

Cyclin D3 (CCND3) (NM_001136017) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cyclin D3 (CCND3) (NM_001136017) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Cyclin D3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG227101 representing NM_001136017 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAGCTGCTGTGTTGCGAAGGCACCCGGCACGCGCCCCGGGCCGGCCGACCCGCGGCTGCTGGGG
ACCAGCGTGTCTGCAGAGCCTGCTCCGCCTGGAGGAGCGCTACGTACCCCGCGCCTCCTACTTCCAGTG
CGTGCAGCGGGAGATCAAGCCGCACATGCGGAAGATGCTGGCTTACTGGATGCTGGAGGTATGTGAGGAG
CAGCGCTGTGAGGAGGAAGTCTTCCCCCTGGCCATGAACACTACCTGGATCGCTACCTGTCTTGCCTCCCCA
CCCGAAAGGCGCAGTTGCAGCTCCTGGGTGCGGTCTGCATGCTGCTGGCCTCAAGCTGCGCGAGACCAC
GCCCTGACCATCGAAAACTGTGCATCTACACCGACCACGCTGTCTCTCCCGCCAGTTGCGGGACTGG
GAGGTGCTGGTCTAGGGAAGCTCAAGTGGGACCTGGCTGCTGTGATTGCACATGATTTCTGGCCTTCA
TTCTGCACCGGCTCTCTGCCCCGTGACCGACAGGCCTTGGTCAAAAAGCATGCCAGACCTTTTTGGC
CCTCTGTGCTACAGATTACCTTTGCCATGTACCCGCCATCCATGATCGCCACGGGCAGCATTGGGGCT
GCAGTGAAGGCTGGGTGCCTGCTCCATGTCCGGGATGAGCTCACAGAGCTGCTGGCAGGGATCACTG
GCACTGAAGTGGACTGCCTGCGGCCTGTGAGGAGCAGATCGAAGCTGCACTCAGGGAGAGCCTCAGGGA
AGCCTCTCAGACCAGCTCAGCCCAGCGCCAAAGCCCCCGGGCTCCAGCAGCCAAGGGCCAGCCAG
ACCAGCACTCCTACAGATGTCACAGCCATACACCTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG227101 representing NM_001136017
Red=Cloning site Green=Tags(s)

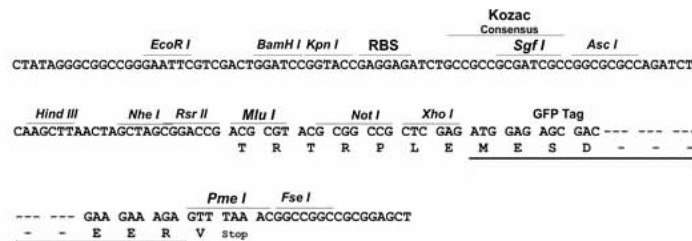
MELLCCGTRHAPRAGDPDLLGDQRLVQSLRLLEERYVPRASYFQCVQREIKPHMRKMLAYWMLEVCEE
 QRCEEEVFPLAMNYLDRYLSCVPTRKAQLQLLGAVCMLLASKLRETTPLTIEKLCIYTDHAVSPRQLRDW
 EVLVLGKLGKLDLAAVIAHDFLAFILHRLSLPRDRQALVKKHAQTFLALCATDYTFAMYPPSMIATGSIGA
 AVQGLGACSMGDELTELLAGITGTEVDCLRACQEQIEAALRESLREASQTSSSPAPKAPRGSSSQGPSQ
 TSTPTDVTAIHL

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



ACCN: NM_001136017

ORF Size: 633 bp

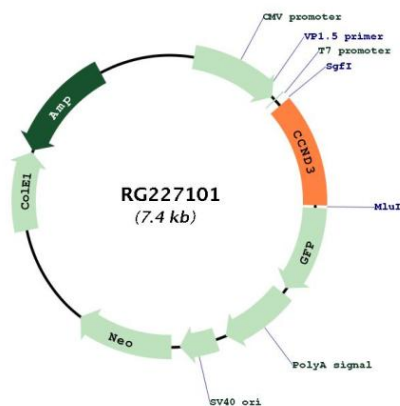
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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:	<ol style="list-style-type: none">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_001136017.2 , NP_001129489.1
RefSeq Size:	2104 bp
RefSeq ORF:	636 bp
Locus ID:	896
UniProt ID:	P30281
Cytogenetics:	6p21.1
Protein Families:	Druggable Genome
Protein Pathways:	Cell cycle, Focal adhesion, Jak-STAT signaling pathway, p53 signaling pathway, Wnt signaling pathway
Gene Summary:	<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 RG227101