

Product datasheet for **RG235572**

Cyclin D3 (CCND3) (NM_001287434) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Cyclin D3 (CCND3) (NM_001287434) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: CCND3
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG235572 representing NM_001287434.
 Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCCGCATCGCC
ATGTACCCGCCATCCATGATCGCCACGGGCAGCATTGGGGCTGCAGTGCAAGGCCTGGGTGCCTGCTCC
ATGTCCGGGGATGAGCTCACAGAGCTGCTGGCAGGGATCACTGGCACTGAAGTGGACTGCCTGCCGGCC
TGTCAGGAGCAGATCGAAGCTGCACTCAGGGAGAGCCTCAGGGAAGCCTCTCAGACCAGCTCCAGCCCA
GCGCCAAAGCCCCCGGGGCTCCAGCAGCCAAGGGCCAGCCAGACCAGCACTCCTACAGATGTACA
GCCATACACCTG
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
```

Protein Sequence: >Peptide sequence encoded by RG235572
 Blue=ORF Red=Cloning site Green=Tag(s)

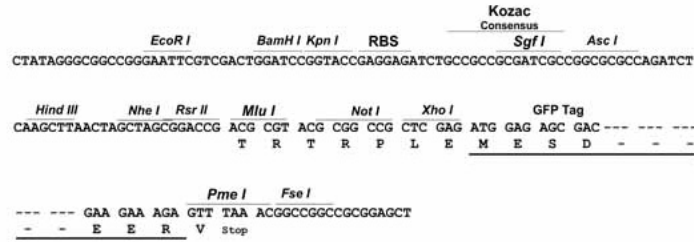
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MYPPSMIATGSIGAAVQGLGACSMGDELTELLAGITGTEVDCLRACQEIEAALRESLREASQTSSSP
APKAPRGSSSQGPSQSTSTPTDVTAIHL
TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV
MGYGFYHFGTYPSGYENPFLHAINNGYTNRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPE
SVIFTDKIIRSNTVEHLHPMGDNDLDGSFTRTFSLRDGGYSSVVD SHMHFKSAIHPSILQNGGPMFA
FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV
```

Restriction Sites: SgfI-MluI

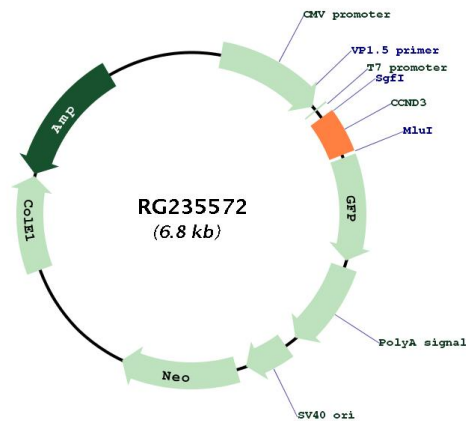


Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



ACCN: NM_001287434

ORF Size: 288 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).
RefSeq:	NM_001287434.1 , NP_001274363.1
RefSeq Size:	2065 bp
RefSeq ORF:	291 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
MW:	10.2 kDa
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 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]