

# **Product datasheet for RC226976**

### OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

# Cyclin D3 (CCND3) (NM 001136125) Human Tagged ORF Clone

#### **Product data:**

**Product Type: Expression Plasmids** 

**Product Name:** Cyclin D3 (CCND3) (NM 001136125) Human Tagged ORF Clone

Tag: Myc-DDK Symbol: Cyclin D3 **Mammalian Cell** Neomycin

Selection:

pCMV6-Entry (PS100001) Vector: E. coli Selection: Kanamycin (25 ug/mL)

>RC226976 representing NM\_001136125 **ORF Nucleotide** Red=Cloning site Blue=ORF Green=Tags(s) Sequence:

> TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC **GCCGCGATCGCC**

> ATGGAGCTGCTGTTGCGAAGGCACCCGGCACGCCCCGGGCCGGGCCGGACCCGCGCTGCTGGGGG CGTGCAGCGGGAGATCAAGCCGCACATGCGGAAGATGCTGGCTTACTGGATGCTGGAGGACTGGGAGGTG CTGGTCCTAGGGAAGCTCAAGTGGGACCTGGCTGCTGTGATTGCACATGATTTCCTGGCCTTCATTCTGC ACCGGCTCTCTCTGCCCCGTGACCGACAGGCCTTGGTCAAAAAGCATGCCCAGACCTTTTTGGCCCTCTG TGCTACAGATTATACCTTTGCCATGTACCCGCCATCCATGATCGCCACGGGCAGCATTGGGGCTGCAGTG CAAGGCCTGGGTGCCTCCATGTCCGGGGATGAGCTCACAGAGCTGCTGGCAGGGATCACTGGCACTG AAGTGGACTGCCTGCGGGCCTGTCAGGAGCAGATCGAAGCTGCACTCAGGGAGAGCCTCAGGGAAGCCTC ACTCCTACAGATGTCACAGCCATACACCTG

> **ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC226976 representing NM\_001136125

Red=Cloning site Green=Tags(s)

MELLCCEGTRHAPRAGPDPRLLGDQRVLQSLLRLEERYVPRASYFQCVQREIKPHMRKMLAYWMLEDWEV LVLGKLKWDLAAVIAHDFLAFILHRLSLPRDRQALVKKHAQTFLALCATDYTFAMYPPSMIATGSIGAAV QGLGACSMSGDELTELLAGITGTEVDCLRACQEQIEAALRESLREASQTSSSPAPKAPRGSSSQGPSQTS

TPTDVTAIHL

**TRTRPL**EQKLISEEDLAANDILDYKDDDDK**V** 

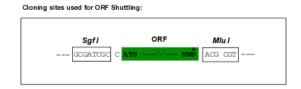


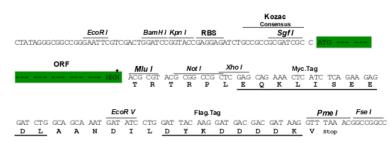


Restriction Sites:

Sgfl-Mlul

**Cloning Scheme:** 





<sup>\*</sup> The last codon before the Stop codon of the ORF

**ACCN:** NM\_001136125

ORF Size: 660 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.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with

0.22um filter is required.

**RefSeq:** NM 001136125.2

RefSeq ORF: 663 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:** 24.1 kDa

**Gene Summary:** The protein encoded by this gene belongs to the highly conserved cyclin family, whose

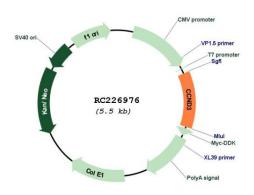
members are characterized by a dramatic periodicity in protein abundance through the cell

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]

# **Product images:**



Circular map for RC226976