

# **Product datasheet for SC324704**

#### OriGene Technologies, Inc.

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## Cyclin D3 (CCND3) (NM\_001136126) Human Untagged Clone

### **Product data:**

**Product Type:** Expression Plasmids

Product Name: Cyclin D3 (CCND3) (NM 001136126) Human Untagged Clone

Tag: Tag Free Symbol: Cyclin D3

**Vector:** <u>pCMV6 series</u>

Fully Sequenced ORF: >NCBI ORF sequence for NM\_001136126, the custom clone sequence may differ by one or

more nucleotides

ATGTACCCGCCATCCATGATCGCCACGGGCAGCATTGGGGCTGCAGTGCAAGGCCTGGGTGCCTGCTCCATGTCCGGGGATGAGCTCACAGAGCTGCTGGCAGGGATCACTGGCACTGAAGCTGCACTGCAGGGCCTGTCAGGAGCCAGAGCCTCAGGGAGAGCCTCAGGGAAGCCTCCAGCCCAAAGCCCCAGCGCCCAAAGCCCCCCGGGGCTCCAGCAGCCAA

GGGCCCAGCCAGACCAGCACTCCTACAGATGTCACAGCCATACACCTG

**Restriction Sites:** Please inquire ACCN: NM\_001136126

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning

into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

**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.

**RefSeq:** NM 001136126.1, NP 001129598.1





### Cyclin D3 (CCND3) (NM\_001136126) Human Untagged Clone - SC324704

RefSeq Size: 1888 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

**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 phosphorulation of tumor suppressor protein Pb. The

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] Transcript Variant: This variant (4) differs in the 5' UTR and coding sequence compared to variant 2. The resulting isoform (4) is shorter at the N-terminus compared to isoform 2.

Variants 4 and 5 encode the same protein.