

Product datasheet for **RC226976**

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 Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC226976 representing NM_001136125
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCCGATCGCC

ATGGAGCTGCTGTGTTGCGAAGGCACCCGGCACGCGCCCCGGGCCGGGCCGACCCGCGGCTGCTGGGGG
 ACCAGCGTGTCTGCAGAGCCTGCTCCGCCTGGAGGAGCGCTACGTACCCCGCGCCTCCTACTTCCAGTG
 CGTGCAGCGGGAGATCAAGCCGCACATGCGGAAGATGCTGGCTTACTGGATGCTGGAGGACTGGGAGGTG
 CTGGTCTTAGGGAAGCTCAAGTGGGACCTGGCTGCTGTGATTGCACATGATTTCTGGCCCTCATTCTGC
 ACCGGCTCTCTGCCCCGTGACCGACAGGCCTTGGTCAAAAAGCATGCCAGACCTTTTGGCCCTCTG
 TGCTACAGATTATACCTTTGCCATGTACCCGCCATCCATGATCGCCACGGGCAGCATTGGGGCTGCAGTG
 CAAGGCCTGGGTGCCTGCTCCATGTCCGGGATGAGCTCACAGAGCTGCTGGCAGGGATCACTGGCACTG
 AAGTGGACTGCCTGCGGGCCTGTGAGGAGCAGATCGAAGCTGCACTCAGGGAGAGCCTCAGGGAAGCCTC
 TCAGACCAGTCCAGCCAGCGCCAAAGCCCCCGGGCTCCAGCAGCCAAGGGCCAGCCAGACCAGC
 ACTCCTACAGATGTCACAGCCATACACCTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC226976 representing NM_001136125
Red=Cloning site Green=Tags(s)

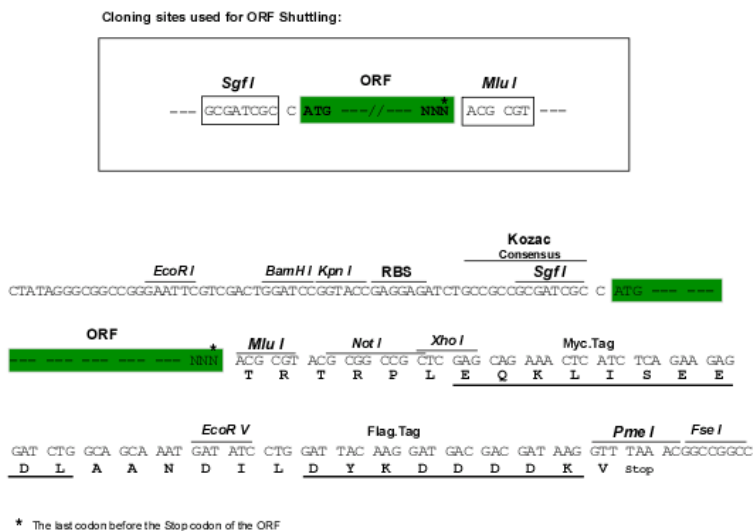
MELLCEGTRHAPRAGDPRLLDQQRVLQSLRLLEERYVPRASYFQCVQREIKPHMRKMLAYWMLDWEV
 LVLGKLKWDLAAVIAHDFLAFILHRLSLPRDRQALVKKHAQTFLALCATDYTFAMYPPSMIATGSIGAAV
 QGLGACSMGDELTELLAGITGTEVDCLRACQEIEAALRESLREASQTS SSPAPKAPRGSSSQGPSQTS
 TPTDVTAIHL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV



Restriction Sites: SgfI-MluI

Cloning Scheme:



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 10µg of transfection-ready, dried plasmid DNA (reconstitute with 100 µl of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100µl 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_001136125.2](#)

RefSeq ORF: 663 bp

Locus ID: 896

UniProt ID: [P30281](#)

Cytogenetics: 6p21.1

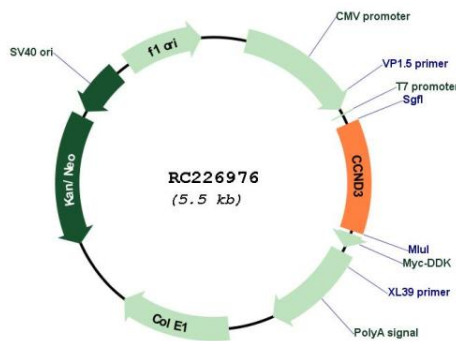
Protein Families: Druggable Genome

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