

Product datasheet for RC210316L4V

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Cyclin D2 (CCND2) (NM 001759) Human Tagged ORF Clone Lentiviral Particle

Product data:

Product Type: Lentiviral Particles

Product Name: Cyclin D2 (CCND2) (NM 001759) Human Tagged ORF Clone Lentiviral Particle

Symbol: Cyclin D2

Synonyms: KIAK0002; MPPH3

Mammalian Cell

Selection:

Puromycin

Vector: pLenti-C-mGFP-P2A-Puro (PS100093)

Tag: mGFP

ACCN: NM_001759

ORF Size: 867 bp

ORF Nucleotide

The ORF insert of this clone is exactly the same as(RC210316).

Sequence:

Cytogenetics:

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.

RefSeq: <u>NM 001759.2</u>

 RefSeq Size:
 6531 bp

 RefSeq ORF:
 870 bp

 Locus ID:
 894

 UniProt ID:
 P30279

Domains: cyclin_C, CYCLIN, cyclin

12p13.32

Protein Families: Druggable Genome





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Protein Pathways: Cell cycle, Focal adhesion, Jak-STAT signaling pathway, p53 signaling pathway, Wnt signaling

pathway

MW: 33.1 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 CDK4 or CDK6 and functions as a regulatory subunit of the complex, 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. Knockout studies of the homologous gene in mouse suggest the essential roles of this gene in ovarian granulosa and germ cell proliferation. High level expression of this gene was observed in ovarian and testicular tumors. Mutations in this gene are associated with megalencephaly-polymicrogyria-polydactyly-hydrocephalus syndrome 3 (MPPH3). [provided by RefSeq, Sep 2014]