

Product datasheet for AM20617PU-N

OriGene Technologies, Inc.

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Cyclin D2 (CCND2) Mouse Monoclonal Antibody [Clone ID: CY-D2]

Product data:

Product Type: Primary Antibodies

Clone Name: CY-D2
Applications: IF, WB

Recommended Dilution: Western Blot: 2 - 4 µg/ml.

Immunocytochemistry.

Reactivity: Human, Mouse

Host: Mouse Isotype: IgG2a

Clonality: Monoclonal

Immunogen: Recombinant human cyclin D2 protein

Specificity: This antibody reacts to Cyclin D2.

Formulation: 1.2 % sodium acetate, with 2 mg BSA and 0.01 mg sodium azide as preservative.

State: Purified

State: Lyphilized purified Ig fraction

Reconstitution Method: Restore with 1.2% sodium acetate or neutral PBS

Concentration: 0,1 mg/ml (after reconstitution with PBS)

Purification: Affinity chromatography

Conjugation: Unconjugated

Storage: Prior to reconstitution store at -20°C.

Following reconstitution store undiluted at 2-8°C for one month

or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.

Stability: Shelf life: one year from despatch.

Gene Name: cyclin D2

Database Link: Entrez Gene 12444 MouseEntrez Gene 894 Human

P30279





Background:

Cyclin D2, also known as CCND2, is a human gene. 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. Cyclin D1, Cyclin D2 and Cyclin D3 are the members of the cyclin family. Cyclin D2 mapped to 12p131, since the CCND1 gene is on 11q13, this may be another bit of evidence of the homology of chromosomes 11 and 12. Choi D et al proved the expression of pseudogene cyclin D2 mRNA in the human ovary increases with age, which may be a novel marker for decreased ovarian function associated with the aging process. 2 And 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. Inaba et al. (1992) used murine cDNA clones for 3 cyclin D genes that are normally expressed during the G1 phase of the cell cycle to clone the cognate human genes. D-type cyclins (cyclins D1, D2, and D3) are regarded as essential links between cell environment and the core cell cycle machinery. Cyclin D2(CCND2) gene ia assigned to 12p13.

Synonyms: Cyclin-D2, CCND2

Protein Families: Druggable Genome

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

pathway