

Product datasheet for AP23242PU-N

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Cyclin D1 (CCND1) (N-term) Rabbit Polyclonal Antibody

Product data:

Product Type: Primary Antibodies

Applications: WB

Reactivity: Western blot: 1µg/ml. Human, Mouse, Rat

Host: Rabbit Isotype: IgG

Clonality: Polyclonal

Immunogen: Synthetic peptide corresponding to a sequence at the N-terminal of human Cyclin D1

Specificity: This antibody detects Cyclin D1 at N-term. No cross reactivity with other proteins.

Formulation: 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3

State: Aff - Purified

State: Lyophilized Ig fraction

Reconstitution Method: 0.2ml of distilled water will yield a concentration of 500µg/ml.

Purification: Immunogen affinity purified

Conjugation: Unconjugated

Storage: Store at 2 - 8 °C for up to 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 D1

Database Link: Entrez Gene 12443 MouseEntrez Gene 58919 RatEntrez Gene 595 Human

P24385





Background:

D-type cyclins (cyclins D1, D2, and D3) are regarded as essential links between cell environment and the core cell cycle machinery. CyclinD1(CCND1), also known as BCL1. Expression of cyclin D1, but not of cyclins A and E, was induced by transfection of the RB gene into RB-deficient tumor cells. cyclin D1 gene can function as an oncogene. Cyclin D1 expression is regulated by the retinoblastoma protein.

The protein belongs to the highly conserved cyclin family, whose members are characterized by a dramatic periodicity in protein abundance throughout the cell cycle. Cyclin D1 encodes the regulatory subunit of a holoenzyme that phosphorylates and inactivates the retinoblastoma protein and promotes progression through the G1-S phase of the cell cycle. Amplification or overexpression of cyclin D1 plays pivotal roles in the development of a subset of human cancers including parathyroid adenoma, breast cancer, colon cancer, lymphoma, melanoma, and prostate cancer. The cyclin D1 gene is overexpressed in human breast cancers and is required for oncogene-induced tumorigenesis. Brisken et al. (2003) found that prolactin (PRL; 176760) induced IGF2 (147470) mRNA and IGF2 induced cyclin D1 protein expression in mouse mammary epithelial cultures. And they also concluded that IGF2 is a mediator of prolactin-induced alveologenesis and that prolactin, IGF2, and cyclin D1 are components of a developmental pathway in mammary gland.

Synonyms: Cyclin-D1, PRAD-1 oncogene, BCL-1 oncogene, CCND1, BCL1, PRAD1

Protein Families: Druggable Genome, Stem cell - Pluripotency, Stem cell relevant signaling - DSL/Notch

pathway, Stem cell relevant signaling - JAK/STAT signaling pathway, Stem cell relevant

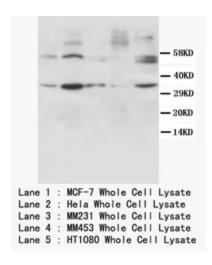
signaling - Wnt Signaling pathway

Protein Pathways: Acute myeloid leukemia, Bladder cancer, Cell cycle, Chronic myeloid leukemia, Colorectal

cancer, Endometrial cancer, Focal adhesion, Glioma, Jak-STAT signaling pathway, Melanoma, Non-small cell lung cancer, p53 signaling pathway, Pancreatic cancer, Pathways in cancer, Prostate cancer, Small cell lung cancer, Thyroid cancer, Viral myocarditis, Wnt signaling

pathway

Product images:



Polyclonal Anti-Cyclin D1 Antibody