

Product datasheet for TA354190

OriGene Technologies, Inc.

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Cyclin D1 (CCND1) Rabbit Polyclonal Antibody

Product data:

Product Type: Primary Antibodies

Recommended Dilution: WB 0.1-1 μg/ml ELISA 0.01-0.1 μg/ml IP 2-5 μg/ml IHC 2-10 μg/ml FC 5-10 μg/ml

Reactivity: Human, Mouse, Rat

Host: Rabbit Isotype: IgG

Clonality: Polyclonal

Immunogen: A synthetic peptide derived from C-terminus of human cyclin D1 protein. This sequence is

identical to human, mouse, rat.

Formulation: This affinity purified antibody is supplied in sterile Phosphate buffered saline (pH7.2)

containing antibody stabilizer.

Purification: The Rabbit IgG is purified by Epitope Affinity Purification

Conjugation: Unconjugated

Storage: Store at -20°C as received.

Stability: Stable for 12 months from date of receipt.

Predicted Protein Size: 36 kDa

Gene Name: cyclin D1

Database Link: NP 444284

Entrez Gene 12443 MouseEntrez Gene 58919 RatEntrez Gene 595 Human

P24385





Background:

Cyclin family is highly conserved which are characterized by a dramatic periodicity in protein abundance throughout 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 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 tumor suppressor protein Rb and the expression of this gene is regulated positively by Rb. The increased expression of cyclin D1 can play a critical role in tumor development and in maintenance of the malignant phenotype, such as human neoplasms including mantle cell lymphomas (MCL). Mutations, amplification and overexpression of this gene, which alters cell cycle progression, are observed frequently in a variety of tumors and may contribute to tumorigenesis.

Synonyms: BCL1; D11S287E; PRAD1; U21B31

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