

Product datasheet for AM32864PU-S

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

Cyclin D1 (CCND1) Mouse Monoclonal Antibody [Clone ID: DCS-6]

Product data:

Product Type: Primary Antibodies

Clone Name: DCS-6

Applications: FC, IF, IHC, IP, WB

Recommended Dilution: ELISA and Biological Function Blockade: Use Antibody without BSA and Azide.

Western Blot: 5-10 µg/ml.

Immunohistochemistry on Frozen and Paraffin Sections: $0.5-1 \mu g/ml$ for 30 min at RT. Immunohistochemical staining of formalin/paraffin tissues is enhanced by unmasking of the target epitope by boiling the tissue sections in 10mM citrate buffer, pH 6.0, for 10 min

followed by cooling at room temp for 20 min.

Immunoprecipitation: 1-2 μg/500 μg protein lysate.

Flow Cytometry: $0.5-1 \mu g/10^6$ cells. Immunofluorescence: $1-2 \mu g/ml$.

Positive Control: T47D, ZR75, BT474, SKBR3, MCF-7, MDA-MB-453, HT29, Ramos, Jurkat or A431 cells. ~60% of mantle cell lymphomas and ~40% of breast carcinomas are positive.

Reactivity: Human, Monkey, Mouse, Rat

Host: Mouse Isotype: IgG2a

Clonality: Monoclonal

Immunogen: Human recombinant full length Cyclin D1 protein.

Specificity: Recognizes a protein of 36kDa, identified as Cyclin D1. Cyclin D1, one of the key cell cycle

regulators, is a putative proto-oncogene overexpressed in a wide variety of Human

neoplasms.

This antibody neutralizes the activity of Cyclin D1*in vivo*. About 60% of mantle cell

lymphomas (MCL) contain a t(11; 14)(q13; q32) translocation resulting in over-expression of

Cyclin D1.

This antibody is useful in identifying mantle cell lymphomas (Cyclin D1 positive) from CLL/SLL and follicular lymphomas (Cyclin D1 negative). Occasionally, hairy cell leukemia and plasma

cell myeloma weakly express Cyclin D1.

Cellular Localization: Nuclear.





Cyclin D1 (CCND1) Mouse Monoclonal Antibody [Clone ID: DCS-6] - AM32864PU-S

Formulation: 10mM PBS

State: Purified

State: Liquid purified IgG fraction from Bioreactor Concentrate

Stabilizer: 0.05% BSA

Preservative: 0.05% Sodium Azide

Concentration: lot specific

Purification: Protein A/G Chromatography

Conjugation: Unconjugated

Storage: Store undiluted at 2-8°C.

Stability: Shelf life: one year from despatch.

Predicted Protein Size: 36 kDa **Gene Name:** cyclin D1

Database Link: Entrez Gene 595 Human

P24385

Background: Cyclin D1 is a member of a superfamily of cyclins, proteins that govern transitions through

distinct phases of the cell cycle by regulating CDKs. The D-type subfamily includes cyclin D1, D2, and D3. All three are differentially, and sometimes redundantly, expressed in different lineages. However, in every cell type at least one of the three can be detected. Cyclin D1 as well as D2 and D3 have central roles in linking exogenous growth regulating stimuli with the cycling machinery of cells. They are typically considered to be G1 cyclins; synthesis is initiated

during G1 and their expression drives the G1/S phase transition.

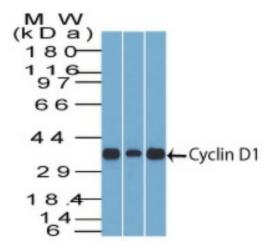
The deregulation of cyclin D1 or other D types is commonly involved in a wide range of cancers. For example cyclin D1 is activated by chromosomal rearrangements in both

parathyroid adenomas and B-cell neoplasms.

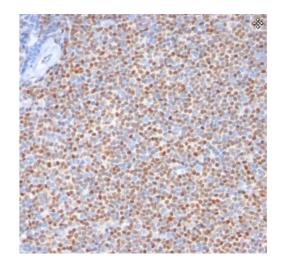
Synonyms: Cyclin-D1, PRAD-1 oncogene, BCL-1 oncogene, CCND1, BCL1, PRAD1



Product images:



Western blot analysis of Cyclin D1 in 1) C2C12, 2) HepG2, and 3) NIH3T3 lysate using Cyclin D1 Antibody (Clone DCS-6).



Formalin-Fixed, Paraffin-Embedded Human mantle cell lymphoma stained with Cyclin D1 Antibody (Clone DCS-6) using peroxidase-conjugate and DAB chromogen. Note nuclear staining of tumor cells.