BioVision 08/16 For research use only

## Anti-Cyclin D1, Rabbit Monoclonal Antibody

CATALOG NO: A1129-50

ALTERNATIVE NAMES: G1/S-specific cyclin-D1, B-cell lymphoma 1 protein, BCL-1, PRAD1

AMOUNT: 50 µl

CLONE: RM241

**IMMUNOGEN:** A peptide corresponding to Cyclin D1

MOLECULAR WEIGHT: ~34 kDa

HOST/ISOTYPE: Rabbit IgG

SPECIES REACTIVITY: Human

**PURIFICATION:** Protein A affinity purified from an animal origin–free culture

supernatant

FORM: Liquid

**FORMULATION:** 50% Glycerol/PBS with 1% BSA and 0.09% sodium azide

SPECIFICITY: RM241 reacts to human Cyclin D1. This antibody may also react to

bovine, mouse or rat Cyclin D1, as predicted by immunogen

homology.

STORAGE CONDITIONS: For long term storage store at -20°C in small aliquots to prevent

freeze-thaw cycles

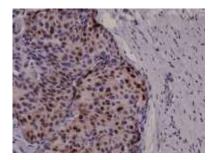
**DESCRIPTION:** Regulatory component of the cyclin D1-CDK4 (DC) complex that

phosphorylates and inhibits members of the retinoblastoma (RB) protein family including RB1 and regulates the cell-cycle during G1/S transition. Phosphorylation of RB1 allows dissociation of the transcription factor E2F from the RB/E2F complex and the subsequent transcription of E2F target genes which are responsible for the progression through the G1 phase. Hypophosphorylates RB1 in early G1 phase. Cyclin D-CDK4 complexes are major integrators of various mitogenenic and antimitogenic signals. Also substrate for SMAD3, phosphorylating SMAD3 in a cell-cycle-dependent manner and repressing its transcriptional activity. Component of the ternary complex, cyclin D1/CDK4/CDKN1B, required for nuclear translocation and activity of the cyclin D-CDK4 complex. Exhibits transcriptional corepressor activity with INSM1 on the NEUROD1 and INS promoters in a cell

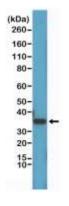
cycle-independent manner.

**APPLICATION:** IHC: 1:500 -1:1000 dilution; WB: 1:1000 - 1:2000 dilution

Note: This information is only intended as a guide. The



Immunohistochemical staining of formalin fixed and paraffin embedded human breast cancer tissue sections using Anti-Cyclin D1 monoclonal antibody at a 1:1000 dilution.



Western Blot of HeLa cell lysates using Anti-Cyclin D1 monoclonal antibody at a 1:1000 dilution, showed a band of Cyclin D1 (~34 kDa) expressed in HeLa cells.

## **RELATED PRODUCTS:**

- Cyclin E1 Antibody (Cat. No. 6932-50)
- Cyclin F Antibody (Cat. No. 6933-50)
- Cyclin G1 Antibody (Cat. No. 6934-50)
- Cyclin-dependent kinase inhibitor 2A\_TAT, Human Recombinant (Cat. No. P1009-20, -100)
- Cyclin-dependent kinase inhibitor 2A, Human Recombinant (Cat. No. P1008-20, -100)

FOR RESEARCH USE ONLY! Not to be used on humans.

