

# Anti-Cyclin D2 Antibody (Monoclonal, DCS-3)

Catalog # ABO10426

Specification

# Anti-Cyclin D2 Antibody (Monoclonal, DCS-3) - Product Information

Application Primary Accession Host Isotype Reactivity Clonality Format Description WB, ICC <u>004827</u> Mouse Mouse IgG2a Human, Mouse Monoclonal Lyophilized

Mouse IgG monoclonal antibody for Cyclin D2, cyclin D2 (CCND2) detection. Tested with WB, ICC in Human; mouse. No cross reactivity with other proteins.

**Reconstitution** Add 1ml of PBS buffer will yield a concentration of 100ug/ml.

## Anti-Cyclin D2 Antibody (Monoclonal, DCS-3) - Additional Information

Gene ID 64033

Other Names G1/S-specific cyclin-D2, Vin-1 proto-oncogene, Ccnd2, Vin-1

Calculated MW 32826 MW KDa

**Application Details** Immunocytochemistry , 1 μg/ml, Human, mouse, -<br>Western blot, 2-4 μg/ml, Human, mouse<br>

Subcellular Localization

Nucleus . Cytoplasm . Membrane . Cyclin D-CDK4 complexes accumulate at the nuclear membrane and are then translocated into the nucleus through interaction with KIP/CIP family members. .

**Protein Name** G1/S-specific cyclin-D2

**Contents** Mouse ascites fluid, 1.2% sodium acetate, 2mg BSA, with 0.01mg NaN3 as preservative.

Immunogen Recombinant human cyclin D2 protein.

Purification Ascites



**Cross Reactivity** No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

**Sequence Similarities** Belongs to the cyclin family. Cyclin D subfamily.

## Anti-Cyclin D2 Antibody (Monoclonal, DCS-3) - Protein Information

Name Ccnd2

Synonyms Vin-1

#### Function

Regulatory component of the cyclin D2-CDK4 (DC) complex that phosphorylates and inhibits members of the retinoblastoma (RB) protein family including RB1 and regulates the cell-cycle during G(1)/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 G(1) phase. Hypophosphorylates RB1 in early G(1) phase. Cyclin D-CDK4 complexes are major integrators of various mitogenenic and antimitogenic signals.

#### **Cellular Location**

Nucleus {ECO:0000250|UniProtKB:P30279}. Cytoplasm {ECO:0000250|UniProtKB:P30279}. Nucleus membrane {ECO:0000250|UniProtKB:P30279}. Note=Cyclin D-CDK4 complexes accumulate at the nuclear membrane and are then translocated into the nucleus through interaction with KIP/CIP family members {ECO:0000250|UniProtKB:P30279}

### Anti-Cyclin D2 Antibody (Monoclonal, DCS-3) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

## Anti-Cyclin D2 Antibody (Monoclonal, DCS-3) - Images

### Anti-Cyclin D2 Antibody (Monoclonal, DCS-3) - Background

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.