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Anti-Cyclin D1 Antibody (Monoclonal, DCS-6)

Catalog # ABO10425

Specification

Anti-Cyclin D1 Antibody (Monoclonal, DCS-6) - Product Information

Application	**WB, IHC-P, IHC-F, ICC**
Primary Accession	P39948
Host	**Mouse**
Isotype	**Mouse IgG2a**
Reactivity	**Human, Mouse, Rat**
Clonality	**Monoclonal**
Format	**Lyophilized**

Description
Mouse IgG monoclonal antibody for Cyclin D1, cyclin D1 (CCND1) detection. Tested with WB, IHC-P, IHC-F, ICC in Human;mouse;rat. No cross reactivity with other proteins.

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

Anti-Cyclin D1 Antibody (Monoclonal, DCS-6) - Additional Information

Gene ID 58919

Other Names
G1/S-specific cyclin-D1, Ccnd1

Calculated MW
33483 MW KDa

Application Details
Immunohistochemistry(Paraffin-embedded Section), 8 µg/ml, Human, mouse, rat, By Heat

Immunocytochemistry , 1 µg/ml, Human, mouse, rat, -
Immunohistochemistry(Frozen Section), 8 µg/ml, Human, mouse, rat, -
Western blot, 4 µg/ml, Human, mouse, rat

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-D1

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

Immunogen
Recombinant human cyclin D1 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 D1 Antibody (Monoclonal, DCS-6) - Protein Information

Name Ccnd1

Function
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 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. Also a 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.

Cellular Location
Nucleus {ECO:0000250|UniProtKB:P24385}. Cytoplasm {ECO:0000250|UniProtKB:P24385}. Nucleus membrane {ECO:0000250|UniProtKB:P24385}. 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:P24385}

Anti-Cyclin D1 Antibody (Monoclonal, DCS-6) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Cyclin D1 Antibody (Monoclonal, DCS-6) - Images

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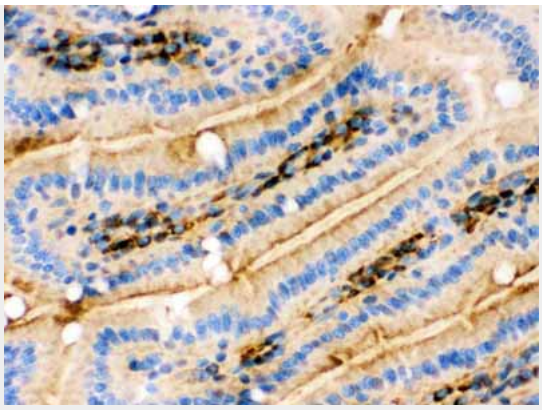
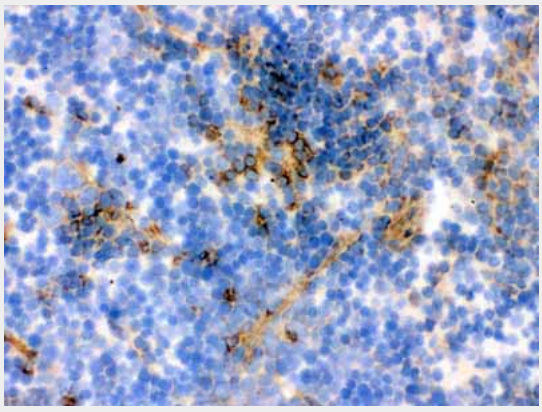
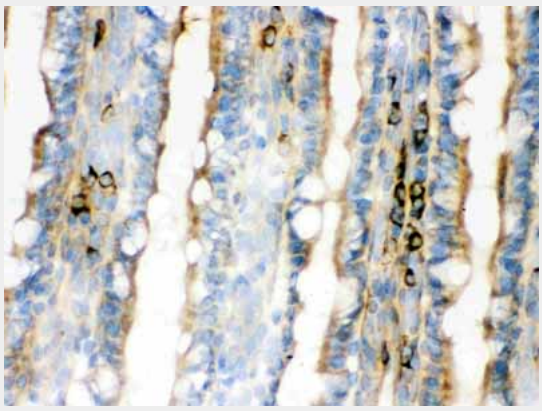


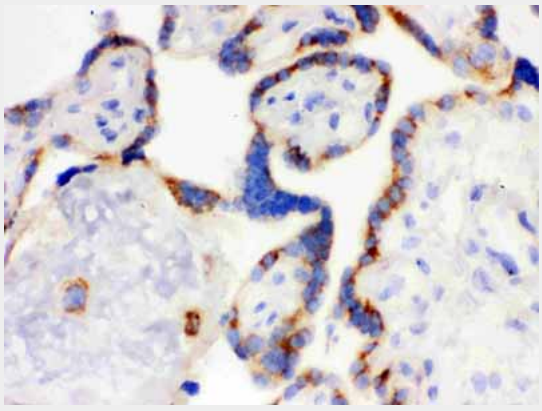
Anti-Cyclin D1 antibody, ABO10425, IHC(F)IHC(F): Mouse Intestine Tissue



Anti-Cyclin D1 antibody, ABO10425, IHC(F)IHC(F): Mouse Spleen Tissue



Anti-Cyclin D1 antibody, ABO10425, IHC(F)IHC(F): Rat Intestine Tissue



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Anti-Cyclin D1 antibody, ABO10425, IHC(F)IHC(F): Human Placenta Tissue

Anti-Cyclin D1 Antibody (Monoclonal, DCS-6) - 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. CCND1 gene to 11q13. cyclin D1 gene can function as an oncogene. Cyclin D1 expression is regulated by the retinoblastoma protein.