

**Cyclin D1 (G1-Cyclin & Mantle Cell Marker) Mouse Monoclonal Antibody [Clone DCS-6]  
Purified Mouse Monoclonal Antibody  
Catalog # AH10365**

**Specification**

**Cyclin D1 (G1-Cyclin & Mantle Cell Marker) Mouse Monoclonal Antibody [Clone DCS-6] -  
Product Information**

Application	IF, FC
Primary Accession	<a href="#">P24385</a>
Other Accession	<a href="#">P25322</a> , <a href="#">P39948 (Rat)</a>
Reactivity	Human, Mouse, Rat, Monkey
Host	Mouse
Clonality	Monoclonal
Isotype	IgG2a, kappa
Calculated MW	36kDa kDa

**Cyclin D1 (G1-Cyclin & Mantle Cell Marker) Mouse Monoclonal Antibody [Clone DCS-6] -  
Additional Information**

**Gene ID** 595

**Other Names**

B cell CLL/lymphoma 1, B cell leukemia 1, B-cell lymphoma 1 protein, BCL-1 oncogene, CCND1 protein, CCND1/FSTL3 fusion gene, CCND1/IGHG1 fusion gene CCND1/IGLC1 fusion gene, CCND1/PTH fusion gene, cD1, Cyl 1, G1/S-specific cyclin-D1, Parathyroid adenomatosis 1, PRAD1 oncogene

**Target/Specificity**

Human recombinant full length cyclin D1 protein

**Format**

0.5ml at 100ug/ml with BSA and azide

**Storage**

Store at 2 to 8°C. Antibody is stable for 24 months.

**Precautions**

Cyclin D1 (G1-Cyclin & Mantle Cell Marker) Mouse Monoclonal Antibody [Clone DCS-6] is for research use only and not for use in diagnostic or therapeutic procedures.

**Cyclin D1 (G1-Cyclin & Mantle Cell Marker) Mouse Monoclonal Antibody [Clone DCS-6] -  
Protein Information**

**Name** CCND1 {ECO:0000303|PubMed:8204893, ECO:0000312|HGNC:HGNC:1582}

**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 (PubMed:<a href="http://www.uniprot.org/citations/1827756" target="\_blank">1827756</a>, PubMed:<a href="http://www.uniprot.org/citations/1833066" target="\_blank">1833066</a>, PubMed:<a href="http://www.uniprot.org/citations/19412162" target="\_blank">19412162</a>, PubMed:<a href="http://www.uniprot.org/citations/33854235" target="\_blank">33854235</a>, PubMed:<a href="http://www.uniprot.org/citations/8114739" target="\_blank">8114739</a>, PubMed:<a href="http://www.uniprot.org/citations/8302605" target="\_blank">8302605</a>). 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 (PubMed:<a href="http://www.uniprot.org/citations/1827756" target="\_blank">1827756</a>, PubMed:<a href="http://www.uniprot.org/citations/1833066" target="\_blank">1833066</a>, PubMed:<a href="http://www.uniprot.org/citations/19412162" target="\_blank">19412162</a>, PubMed:<a href="http://www.uniprot.org/citations/8114739" target="\_blank">8114739</a>, PubMed:<a href="http://www.uniprot.org/citations/8302605" target="\_blank">8302605</a>). Hypophosphorylates RB1 in early G(1) phase (PubMed:<a href="http://www.uniprot.org/citations/1827756" target="\_blank">1827756</a>, PubMed:<a href="http://www.uniprot.org/citations/1833066" target="\_blank">1833066</a>, PubMed:<a href="http://www.uniprot.org/citations/19412162" target="\_blank">19412162</a>, PubMed:<a href="http://www.uniprot.org/citations/8114739" target="\_blank">8114739</a>, PubMed:<a href="http://www.uniprot.org/citations/8302605" target="\_blank">8302605</a>). Cyclin D-CDK4 complexes are major integrators of various mitogenic and antimitogenic signals (PubMed:<a href="http://www.uniprot.org/citations/1827756" target="\_blank">1827756</a>, PubMed:<a href="http://www.uniprot.org/citations/1833066" target="\_blank">1833066</a>, PubMed:<a href="http://www.uniprot.org/citations/19412162" target="\_blank">19412162</a>, PubMed:<a href="http://www.uniprot.org/citations/8302605" target="\_blank">8302605</a>). Also a substrate for SMAD3, phosphorylating SMAD3 in a cell-cycle-dependent manner and repressing its transcriptional activity (PubMed:<a href="http://www.uniprot.org/citations/15241418" target="\_blank">15241418</a>). Component of the ternary complex, cyclin D1/CDK4/CDKN1B, required for nuclear translocation and activity of the cyclin D-CDK4 complex (PubMed:<a href="http://www.uniprot.org/citations/9106657" target="\_blank">9106657</a>). Exhibits transcriptional corepressor activity with INSM1 on the NEUROD1 and INS promoters in a cell cycle-independent manner (PubMed:<a href="http://www.uniprot.org/citations/16569215" target="\_blank">16569215</a>, PubMed:<a href="http://www.uniprot.org/citations/18417529" target="\_blank">18417529</a>).

### Cellular Location

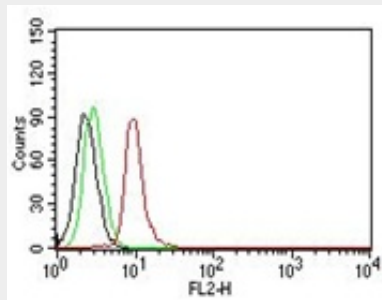
Nucleus. Cytoplasm Nucleus membrane. Note=Cyclin D-CDK4 complexes accumulate at the nuclear membrane and are then translocated to the nucleus through interaction with KIP/CIP family members

### Cyclin D1 (G1-Cyclin & Mantle Cell Marker) Mouse Monoclonal Antibody [Clone DCS-6] - Protocols

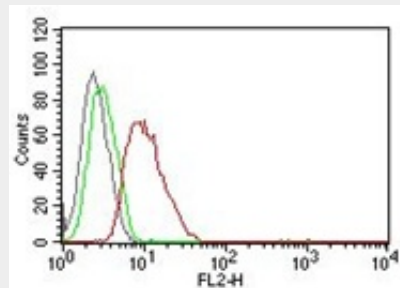
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Cyclin D1 (G1-Cyclin & Mantle Cell Marker) Mouse Monoclonal Antibody [Clone DCS-6] - Images



Flow Cytometric analysis of human Cyclin D1 on Jurkat Cells. Black: Cells alone; Green: Isotype Control; Red: PE-labeled Cyclin D1 MAb (DCS-6).



Flow Cytometric analysis of human Cyclin D1 on MCF-7 Cells. Black: Cells alone; Green: Isotype Control; Red: PE-labeled Cyclin D1 MAb (DCS-6).

### **Cyclin D1 (G1-Cyclin & Mantle Cell Marker) Mouse Monoclonal Antibody [Clone DCS-6] - References**

1. Lukas J, et. al. Oncogene, 1994, 9(3):707-18.
2. Gillett C, et. al. Cancer Research, 1994, 54(7):1812-7.
3. Bartkova J, et. al. Journal of Pathology, 1994, 172(3):237-45.