

**Cyclin D3 Polyclonal Antibody**  
**Catalog # AP69358****Specification**

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**Cyclin D3 Polyclonal Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">P30281</a>
Reactivity	Human, Mouse, Rat, Monkey
Host	Rabbit
Clonality	Polyclonal

**Cyclin D3 Polyclonal Antibody - Additional Information****Gene ID** 896**Other Names**

CCND3; G1/S-specific cyclin-D3

**Dilution**

WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/5000. Not yet tested in other applications.

**Format**

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

**Storage Conditions**

-20°C

**Cyclin D3 Polyclonal Antibody - Protein Information****Name** CCND3 {ECO:0000303|PubMed:1386336, ECO:0000312|HGNC:HGNC:1585}**Function**

Regulatory component of the cyclin D3-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/8114739" target="\_blank">8114739</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/8114739" target="\_blank">8114739</a>). Hypophosphorylates RB1 in early G(1) phase (PubMed:<a href="http://www.uniprot.org/citations/8114739" target="\_blank">8114739</a>). Cyclin D- CDK4 complexes are major integrators of various mitogenenic and antimitogenic signals (PubMed:<a href="http://www.uniprot.org/citations/8114739" target="\_blank">8114739</a>). Component of the ternary complex, cyclin D3/CDK4/CDKN1B, required for nuclear translocation and activity of the cyclin D-CDK4 complex (PubMed:<a href="http://www.uniprot.org/citations/16782892" target="\_blank">16782892</a>). Shows transcriptional coactivator activity with ATF5 independently of CDK4 (PubMed:<a href="http://www.uniprot.org/citations/15358120" target="\_blank">15358120</a>).

target="\_blank">15358120</a>).

#### Cellular Location

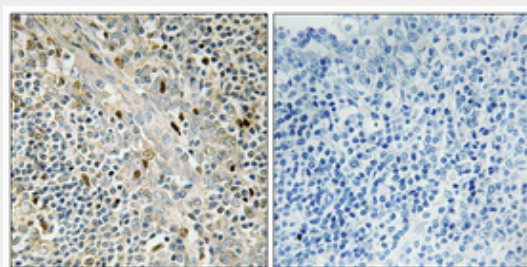
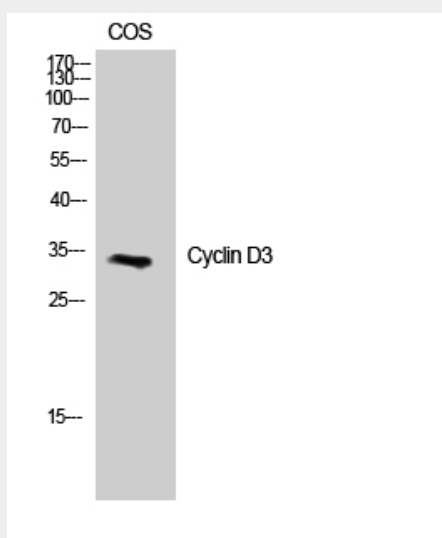
Nucleus. Cytoplasm

### Cyclin D3 Polyclonal Antibody - 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 D3 Polyclonal Antibody - Images



### Cyclin D3 Polyclonal Antibody - Background

Regulatory component of the cyclin D3-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 mitogenic 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 D3/CDK4/CDKN1B, required for nuclear translocation and activity of the cyclin D-CDK4 complex.