

**CCND1 / Cyclin D1 Antibody (aa250-300)**  
**Rabbit Polyclonal Antibody**  
**Catalog # ALS15553**

**Specification**

---

**CCND1 / Cyclin D1 Antibody (aa250-300) - Product Information**

Application	IHC
Primary Accession	<a href="#">P24385</a>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	34kDa KDa

**CCND1 / Cyclin D1 Antibody (aa250-300) - Additional Information**

**Gene ID** 595

**Other Names**

G1/S-specific cyclin-D1, B-cell lymphoma 1 protein, BCL-1, BCL-1 oncogene, PRAD1 oncogene, CCND1, BCL1, PRAD1

**Target/Specificity**

Human CCND1 / Cyclin D1

**Reconstitution & Storage**

Store at 4°C for short term applications. For long term storage, aliquot and store at -20°C.

**Precautions**

CCND1 / Cyclin D1 Antibody (aa250-300) is for research use only and not for use in diagnostic or therapeutic procedures.

**CCND1 / Cyclin D1 Antibody (aa250-300) - 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/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>).

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

#### 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

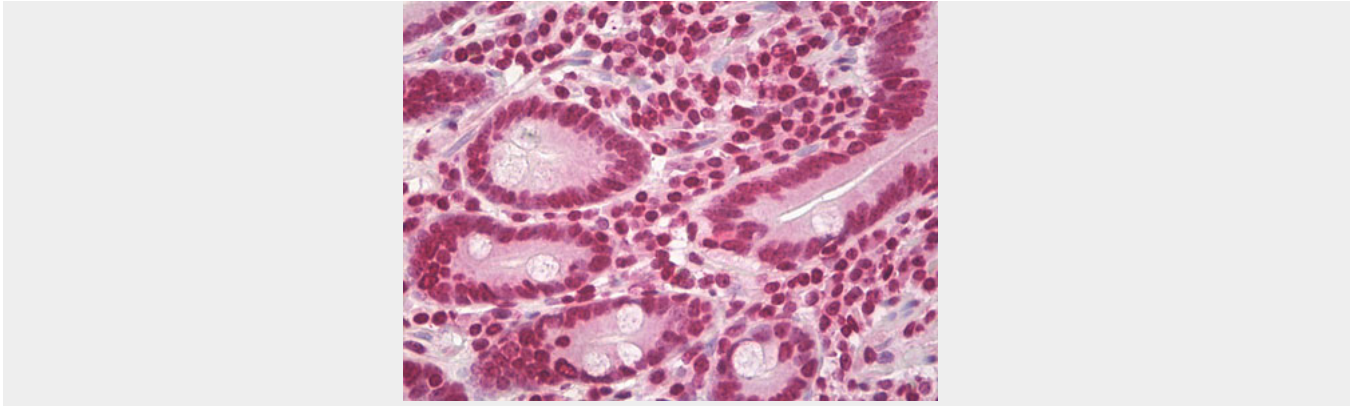
#### CCND1 / Cyclin D1 Antibody (aa250-300) - Protocols

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](#)

#### CCND1 / Cyclin D1 Antibody (aa250-300) - Images





Anti-Cyclin D1 antibody IHC of human small intestine.

### **CCND1 / Cyclin D1 Antibody (aa250-300) - Background**

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 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 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.

### **CCND1 / Cyclin D1 Antibody (aa250-300) - References**

- Motokura T., et al. Nature 350:512-515(1991).
- Lew D.J., et al. Cell 66:1197-1206(1991).
- Xiong Y., et al. Cell 65:691-699(1991).
- Withers D.A., et al. Mol. Cell. Biol. 11:4846-4853(1991).
- Rimokh R., et al. Blood 83:3689-3696(1994).