

**Mouse CCND2 Antibody (C-term T279/T280)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP20417b**

**Specification**

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**Mouse CCND2 Antibody (C-term T279/T280) - Product Information**

|                   |                        |
|-------------------|------------------------|
| Application       | WB,E                   |
| Primary Accession | <a href="#">P30280</a> |
| Other Accession   | <a href="#">Q04827</a> |
| Reactivity        | Mouse                  |
| Predicted         | Rat                    |
| Host              | Rabbit                 |
| Clonality         | Polyclonal             |
| Isotype           | Rabbit IgG             |
| Calculated MW     | 32897                  |
| Antigen Region    | 258-285                |

**Mouse CCND2 Antibody (C-term T279/T280) - Additional Information**

**Gene ID** 12444

**Other Names**

G1/S-specific cyclin-D2, Ccnd2, Cyl-2

**Target/Specificity**

This Mouse CCND2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 258-285 amino acids from the C-terminal region of mouse CCND2.

**Dilution**

WB~~1:1000

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Mouse CCND2 Antibody (C-term T279/T280) is for research use only and not for use in diagnostic or therapeutic procedures.

**Mouse CCND2 Antibody (C-term T279/T280) - Protein Information**

**Name** Ccnd2 {ECO:0000312|MGI:MGI:88314}

**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 mitogenic and antimitogenic signals.

#### Cellular Location

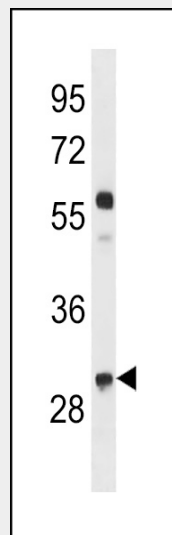
Nucleus {ECO:0000250|UniProtKB:P30279}. Cytoplasm {ECO:0000250|UniProtKB:P30279}. Nucleus membrane {ECO:0000250|UniProtKB:P30279}. Note=Cyclin D-CDK4 complexes accumulate at the nuclear membrane and are then translocated into the nucleus through interaction with KIP/CIP family members {ECO:0000250|UniProtKB:P30279}

#### Mouse CCND2 Antibody (C-term T279/T280) - 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](#)

#### Mouse CCND2 Antibody (C-term T279/T280) - Images



Mouse CCND2 Antibody (C-term T279/T280) (Cat. #AP20417b) western blot analysis in mouse NIH-3T3 cell line lysates (35ug/lane). This demonstrates the Mouse CCND2 antibody detected the Mouse CCND2 protein (arrow).

#### Mouse CCND2 Antibody (C-term T279/T280) - Background

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 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 D2/CDK4/CDKN1B, required for nuclear translocation and activity of the cyclin D-CDK4 complex (By similarity).