

## **CCND1 Antibody (C-term T286)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP20406b

## **Specification**

# CCND1 Antibody (C-term T286) - Product Information

Application WB,E
Primary Accession P24385

Other Accession Q2KI22, Q6FI00

Reactivity
Predicted
Host
Clonality
Isotype
Calculated MW
Antigen Region
Reactivity
Human
Bovine
Rabbit
Polyclonal
Rabbit IgG
23729
264-292

# CCND1 Antibody (C-term T286) - 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

This CCND1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 264-292 amino acids from the C-terminal region of human CCND1.

#### **Dilution**

WB~~1:1000

E~~Use at an assay dependent concentration.

#### **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**

CCND1 Antibody (C-term T286) is for research use only and not for use in diagnostic or therapeutic procedures.

## CCND1 Antibody (C-term T286) - 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:1827756, PubMed:1833066, PubMed:19412162, PubMed:33854235, PubMed:8114739, PubMed:8302605). 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:1827756, PubMed:1833066, PubMed:19412162, PubMed:8114739, PubMed:8302605). Hypophosphorylates RB1 in early G(1) phase (PubMed: 1827756, PubMed: 1833066, PubMed:<u>19412162</u>, PubMed:<u>8114739</u>, PubMed:<u>8302605</u>). Cyclin D-CDK4 complexes are major integrators of various mitogenenic and antimitogenic signals (PubMed:1827756, PubMed:1833066, PubMed: 19412162, PubMed: 8302605). Also a substrate for SMAD3, phosphorylating SMAD3 in a cell-cycle-dependent manner and repressing its transcriptional activity (PubMed: 15241418). Component of the ternary complex, cyclin D1/CDK4/CDKN1B, required for nuclear translocation and activity of the cyclin D-CDK4 complex (PubMed: 9106657). Exhibits transcriptional corepressor activity with INSM1 on the NEUROD1 and INS promoters in a cell cycle-independent manner (PubMed: 16569215, PubMed: 18417529).

#### **Cellular Location**

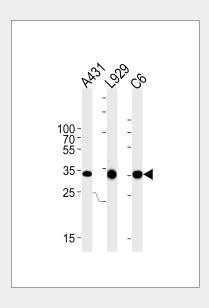
Nucleus. Cytoplasm. Nucleus membrane. Note=Cyclin D-CDK4 complexes accumulate at the nuclear membrane and are then translocated to the nucleus through interaction with KIP/CIP family members

# CCND1 Antibody (C-term T286) - 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

#### CCND1 Antibody (C-term T286) - Images







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CCND1 Antibody (T286) (Cat.# AP20406b) western blot analysis in A431, mouse L929, rat C6 cell line lysates (35ug/lane). This demonstrates the CCND1 antibody detected the CCND1 protein (arrow).

## CCND1 Antibody (C-term T286) - 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 mitogenenic 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.