

CCND1 Antibody (C-term T286)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP20406b

Product Information

Application WB, E
Primary Accession P24385
Other Accession O2KI22

Reactivity Human, Rat, Mouse

Predicted Bovine
Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 33729
Antigen Region 264-292

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.

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:<u>1833066</u>, 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).

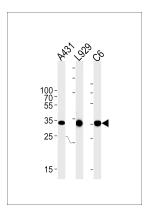
Cellular Location

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

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.

Images



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).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.