

CCND2 Antibody (C-term S279/T280)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP20416b

Product Information

Application WB, E Primary Accession P30279

Other Accession Q8WNW2, Q0P5D3

Reactivity Human **Predicted** Bovine, Pig Host Rabbit Clonality Polyclonal Isotype Rabbit IgG **Clone Names** RB43023 33067 Calculated MW **Antigen Region** 258-285

Additional Information

Gene ID 894

Other Names G1/S-specific cyclin-D2, CCND2

Target/Specificity This CCND2 antibody is generated from rabbits immunized with a KLH

conjugated synthetic peptide between 258-285 amino acids from the

C-terminal region of human CCND2.

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 CCND2 Antibody (C-term S279/T280) is for research use only and not for use

in diagnostic or therapeutic procedures.

Protein Information

Name CCND2 {ECO:0000303|PubMed:1386336, ECO:0000312|HGNC:HGNC:1583}

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

(PubMed:<u>18827403</u>, PubMed:<u>8114739</u>). 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:<u>18827403</u>, PubMed:<u>8114739</u>). Hypophosphorylates RB1 in early G(1) phase (PubMed:<u>18827403</u>, PubMed:<u>8114739</u>). Cyclin D-CDK4 complexes are major integrators of various mitogenenic and antimitogenic signals (PubMed:<u>18827403</u>, PubMed:<u>8114739</u>).

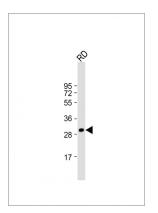
Cellular Location

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

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

Images



Anti-CCND2 Antibody (C-term S279/T280) at 1:1000 dilution + RD whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 33 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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