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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
Calculated MW	33067
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:18827403, PubMed:8114739). 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:18827403, PubMed:8114739). Hypophosphorylates RB1 in early G(1) phase (PubMed:18827403, PubMed:8114739). Cyclin D-CDK4 complexes are major integrators of various mitogenic and antimitogenic signals (PubMed:18827403, PubMed:8114739).

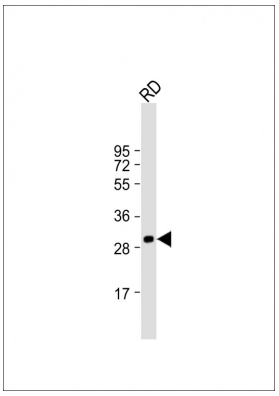
Cellular Location

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 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).

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.