10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Mouse CCND2 Antibody (C-term T279/T280)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20417b

Product Information

Application	WB, E
Primary Accession	P30280
Other Accession	Q04827
Reactivity	Mouse
Predicted	Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB43028
Calculated MW	32897
Antigen Region	258-285

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

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 mitogenenic and antimitogenic signals.

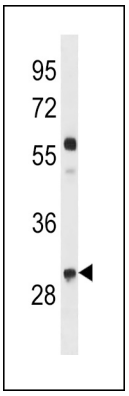
Cellular Location

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}

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



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).