

(RAT) Ccnd3 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP20912b

Product Information

Application	WB, E
Primary Accession	P48961
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB43404
Calculated MW	32434

Additional Information

Gene ID	25193
Other Names	G1/S-specific cyclin-D3, Ccnd3
Target/Specificity	This rat Ccnd3 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 33-66 amino acids from the N-terminal region of rat Ccnd3.
Dilution	WB~~1:500-1:1000 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	(RAT) Ccnd3 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	Ccnd3 {ECO:0000312 RGD:2293}
Function	Regulatory component of the cyclin D3-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. Component of the ternary complex, cyclin D3/CDK4/CDKN1B, required for nuclear translocation and activity of the cyclin D-CDK4 complex. Shows transcriptional coactivator activity with ATF5 independently of CDK4.

Cellular Location

Nucleus {ECO:0000250|UniProtKB:P30281}. Cytoplasm {ECO:0000250|UniProtKB:P30281}

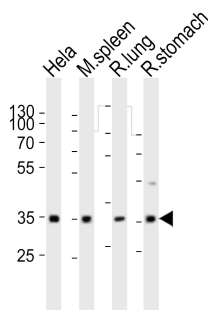
Background

Regulatory component of the cyclin D3-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 D3/CDK4/CDKN1B, required for nuclear translocation and activity of the cyclin D-CDK4 complex.

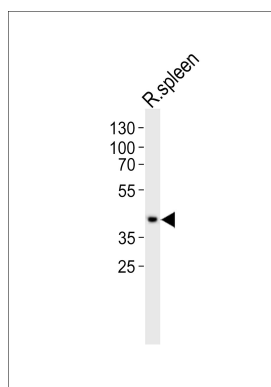
References

Hosokawa Y.,et al.Gene 147:249-252(1994).
Yang M.,et al.Gene 181:153-159(1996).

Images



Western blot analysis of lysates from HeLa cell line, mouse spleen, rat lung, rat stomach tissue (from left to right), using Ccnd3 Antibody (N-term)(Cat. #AP20912b). AP20912b was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysates at 20ug per lane.



Western blot analysis of lysate from rat spleen tissue, using Ccnd3 Antibody (N-term)(Cat. #AP20912b). AP20912b was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysate at 20ug.