

(RAT) Ccnd3 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP20912b

Specification

(RAT) Ccnd3 Antibody (N-term) - Product Information

Application WB,E
Primary Accession P48961
Reactivity Rat
Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG

(RAT) Ccnd3 Antibody (N-term) - 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.

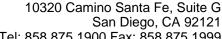
Precautions

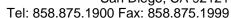
(RAT) Ccnd3 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

(RAT) Ccnd3 Antibody (N-term) - 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 mitogenenic 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

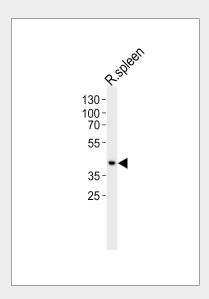
Nucleus {ECO:0000250|UniProtKB:P30281}. Cytoplasm {ECO:0000250|UniProtKB:P30281}

(RAT) Ccnd3 Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

(RAT) Ccnd3 Antibody (N-term) - Images



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.

(RAT) Ccnd3 Antibody (N-term) - 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 mitogenenic and antimitogenic signals. Also substrate for SMAD3, phosphorylating SMAD3 in a cell-cycle-dependent manner and



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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.

(RAT) Ccnd3 Antibody (N-term) - References

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