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R Cdk4 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20515b

Specification

R Cdk4 Antibody (C-term) - Product Information

Application	**IHC-P, IF, WB,E**
Primary Accession	P35426
Reactivity	**Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**33799**
Antigen Region	**272-303**

R Cdk4 Antibody (C-term) - Additional Information

Gene ID 94201

Other Names
Cyclin-dependent kinase 4, Cell division protein kinase 4, PSK-J3, Cdk4

Target/Specificity
This Rat Cdk4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 272-303 amino acids from the C-terminal region of rat Cdk4.

Dilution
IHC-P~~1:25
IF~~1:25
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
R Cdk4 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

R Cdk4 Antibody (C-term) - Protein Information

Name Cdk4

Function Ser/Thr-kinase component of cyclin D-CDK4 (DC) complexes that phosphorylate and inhibit members of the retinoblastoma (RB) protein family including RB1 and regulate the cell-cycle during G(1)/S transition. Phosphorylation of RB1 allows dissociation of the transcription factor E2F from the RB/E2F complexes 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 phosphorylates SMAD3 in a cell-cycle-dependent manner and represses its transcriptional activity. Component of the ternary complex, cyclin D/CDK4/CDKN1B, required for nuclear translocation and activity of the cyclin D-CDK4 complex (By similarity).

Cellular Location
Cytoplasm {ECO:0000250|UniProtKB:P11802}. Nucleus {ECO:0000250|UniProtKB:P11802}. Nucleus membrane {ECO:0000250|UniProtKB:P11802}. Note=Cytoplasmic when non-complexed Forms a cyclin D-CDK4 complex in the cytoplasm as cells progress through G(1) phase. The complex accumulates on the nuclear membrane and enters the nucleus on transition from G(1) to S phase. Also present in nucleoli and heterochromatin lumps. Colocalizes with RB1 after release into the nucleus (By similarity). {ECO:0000250|UniProtKB:P11802}

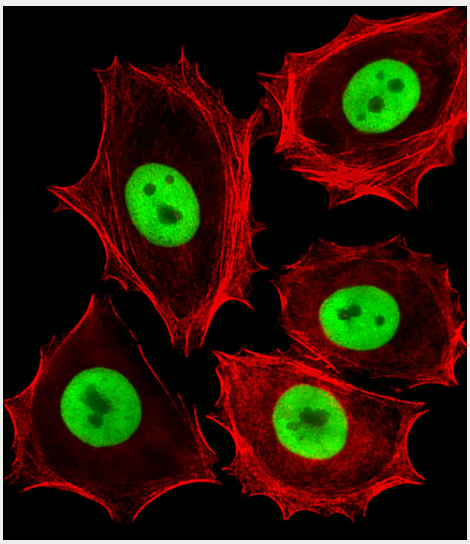
Tissue Location
Expressed in fetal and adult lung. Also expressed in brain, heart, liver, skeletal muscle and testes

R Cdk4 Antibody (C-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

R Cdk4 Antibody (C-term) - Images



Fluorescent image of MCF-7 cells stained with (Rat) Cdk4 Antibody (C-term)(Cat#AP20515B).

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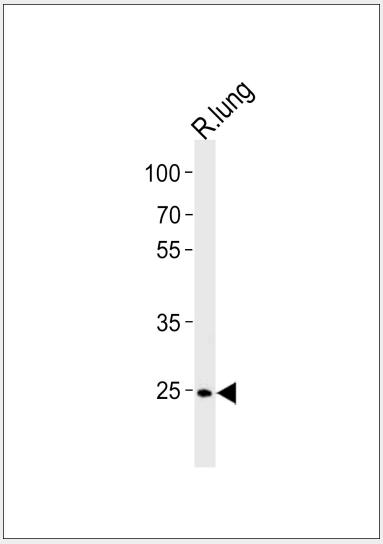
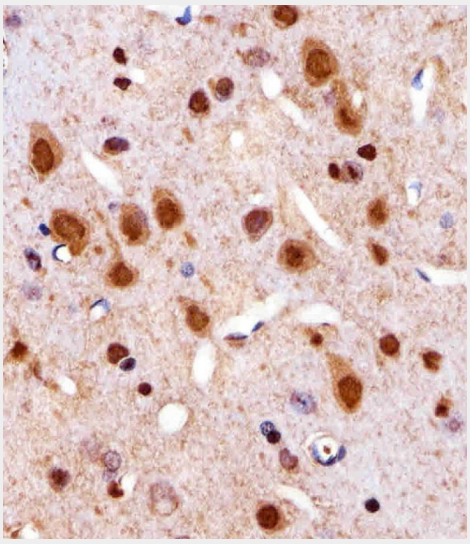
AP20515B was diluted at 1:25 dilution. An Alexa Fluor 488-conjugated goat anti-rabbit lgG at 1:400 dilution was used as the secondary antibody (green). Cytoplasmic actin was counterstained with Alexa Fluor® 555 conjugated with Phalloidin (red).



Rat Cdk4 Antibody (C-term) (Cat. #AP20515b) western blot analysis in rat lung tissue lysates (35ug/lane).This demonstrates the rat Cdk4 antibody detected the rat Cdk4 protein (arrow).



Immunohistochemical analysis of paraffin-embedded R. brain section using R Cdk4 Antibody (C-term)(Cat#AP20515B). AP20515B was diluted at 1:25 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.

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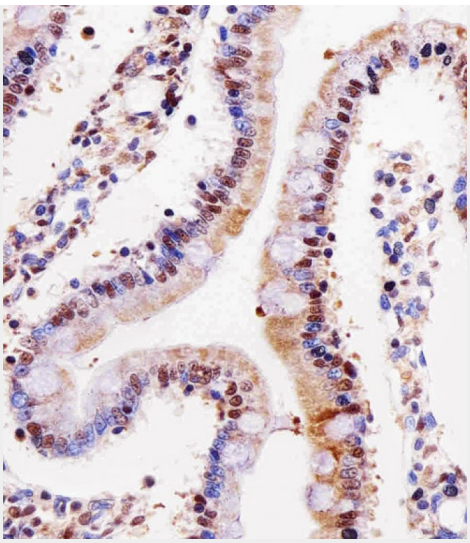

Immunohistochemical analysis of paraffin-embedded rat small intestine section using Rat Cdk4 Antibody (C-term)(Cat#AP20515B). AP20515B was diluted at 1:25 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.

R Cdk4 Antibody (C-term) - Background

Ser/Thr-kinase component of cyclin D-CDK4 (DC) complexes that phosphorylate and inhibit members of the retinoblastoma (RB) protein family including RB1 and regulate the cell-cycle during G(1)/S transition. Phosphorylation of RB1 allows dissociation of the transcription factor E2F from the RB/E2F complexes 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 phosphorylates SMAD3 in a cell-cycle-dependent manner and represses its transcriptional activity. Component of the ternary complex, cyclin D/CDK4/CDKN1B, required for nuclear translocation and activity of the cyclin D-CDK4 complex (By similarity).

R Cdk4 Antibody (C-term) - References

Cho F.S., et al. Biochem. Biophys. Res. Commun. 191:860-865(1993).