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Mouse Cdk4 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP16073b

Product Information

Application	WB, E
Primary Accession	P30285
Other Accession	P35426, NP_034000.1
Reactivity	Mouse
Predicted	Rat, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB35470
Calculated MW	33751
Antigen Region	219-246

Additional Information

Gene ID	12567
Other Names	Cyclin-dependent kinase 4, CRK3, Cell division protein kinase 4, PSK-J3, Cdk4, Crk3
Target/Specificity	This Mouse Cdk4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 219-246 amino acids from the C-terminal region of mouse Cdk4.
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 Cdk4 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	Cdk4
Synonyms	Crk3

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}

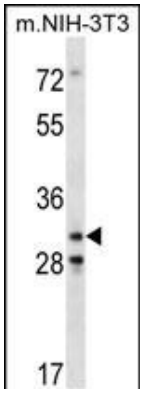
Background

Cdk4 is probably involved in the control of the cell cycle.

References

Trivedi, C.M., et al. Dev. Cell 19(3):450-459(2010)
Beilke, S., et al. Oncogene 29(28):4058-4067(2010)
Puyol, M., et al. Cancer Cell 18(1):63-73(2010)
Wiedemeyer, W.R., et al. Proc. Natl. Acad. Sci. U.S.A. 107(25):11501-11506(2010)
Michaud, K., et al. Cancer Res. 70(8):3228-3238(2010)

Images



Mouse Cdk4 Antibody (C-term) (Cat. #AP16073b) western blot analysis in mouse NIH-3T3 cell line lysates (35ug/lane).This demonstrates the Cdk4 antibody detected the Cdk4 protein (arrow).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.