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Anti-CDK4 Antibody

Mouse Monoclonal Antibody
Catalog # AP53463

Product Information

Primary Accession	P11802
Other Accession	NM_000075.2
Host	Mouse
Clonality	Monoclonal
Isotype	lgG1
Immunogen	Purified recombinant human CDK4 protein expressed in E.coli.
Purification	Affinity purified
Calculated MW	33730

Additional Information

Gene ID	1019
Other Names	Cdk4;cdk4;CDK4protein;CDK4_HUMAN;Celldivisionkinase4;Celldivisionproteinkinase4;CMM3;CMM3;Crk3;Cyclindependentkinase4;Cyclin-dependentkinase4;Melanomacutaneousmalignant3;MGC14458;p34cdk4;PSKJ3;PSK-J3.
Format	Purified mouse monoclonal antibody in PBS(pH 7.4) containing with 0.09% (W/V) sodium azide and 50% glycerol.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Protein Information

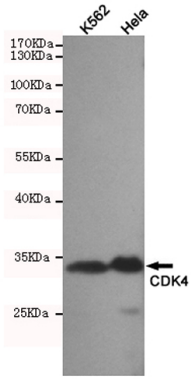
Name	CDK4 {ECO:0000303|PubMed:7652577, ECO:0000312|HGNC:HGNC:1773}
Function	Ser/Thr-kinase component of cyclin D-CDK4 (DC) complexes that phosphorylate and inhibit members of the retinoblastoma (RB) protein family including RB1 and regulate the cell-cycle during G(1)/S transition. Phosphorylation of 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.
Cellular Location	Cytoplasm. Nucleus. Nucleus membrane. 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.

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

Images



Western blot detection of CDK4 in Hela and K562 cell lysates using CDK4 mouse mAb (1:500 diluted).Predicted band size:34KDa.Observed band size:34KDa.

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