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CDK4 Antibody (monoclonal) (M03)

Mouse monoclonal antibody raised against a partial recombinant CDK4.
Catalog # AT1474a

Product Information

Application	WB, IF, E
Primary Accession	P11802
Other Accession	BC003644
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG1 Kappa
Clone Names	4F11
Calculated MW	33730

Additional Information

Gene ID	1019
Other Names	Cyclin-dependent kinase 4, Cell division protein kinase 4, PSK-J3, CDK4
Target/Specificity	CDK4 (AAH03644, 211 a.a. ~ 303 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IF~~1:50~200 E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	CDK4 Antibody (monoclonal) (M03) is for research use only and not for use in diagnostic or therapeutic procedures.

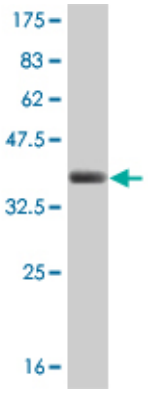
Background

The protein encoded by this gene is a member of the Ser/Thr protein kinase family. This protein is highly similar to the gene products of S. cerevisiae cdc28 and S. pombe cdc2. It is a catalytic subunit of the protein kinase complex that is important for cell cycle G1 phase progression. The activity of this kinase is restricted to the G1-S phase, which is controlled by the regulatory subunits D-type cyclins and CDK inhibitor p16(INK4a). This kinase was shown to be responsible for the phosphorylation of retinoblastoma gene product (Rb). Mutations in this gene as well as in its related proteins including D-type cyclins, p16(INK4a) and Rb were all found to be associated with tumorigenesis of a variety of cancers. Multiple polyadenylation sites of this gene have been reported.

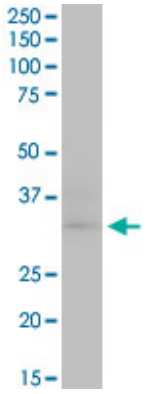
References

Variation at the NFATC2 Locus Increases the Risk of Thiazolinedinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086.The Ras oncogene signals centrosome amplification in mammary epithelial cells through cyclin D1/Cdk4 and Nek2. Zeng X, et al. Oncogene, 2010 Sep 9. PMID 20581865.Pattern of retinoblastoma pathway inactivation dictates response to CDK4/6 inhibition in GBM. Wiedemeyer WR, et al. Proc Natl Acad Sci U S A, 2010 Jun 22. PMID 20534551.A Large-scale genetic association study of esophageal adenocarcinoma risk. Liu CY, et al. Carcinogenesis, 2010 Jul. PMID 20453000.Pharmacologic inhibition of cyclin-dependent kinases 4 and 6 arrests the growth of glioblastoma multiforme intracranial xenografts. Michaud K, et al. Cancer Res, 2010 Apr 15. PMID 20354191.

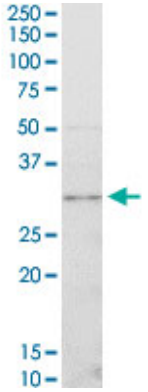
Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (35.97 KDa) .



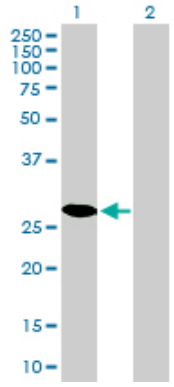
CDK4 monoclonal antibody (M03), clone 4F11. Western Blot analysis of CDK4 expression in 293.

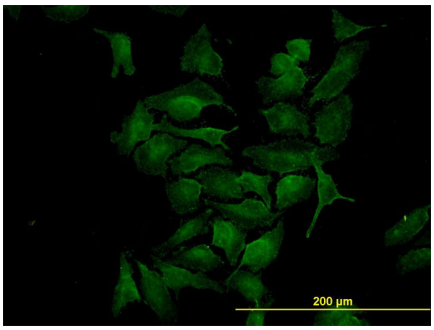


CDK4 monoclonal antibody (M03), clone 4F11. Western Blot analysis of CDK4 expression in Hela S3 NE.

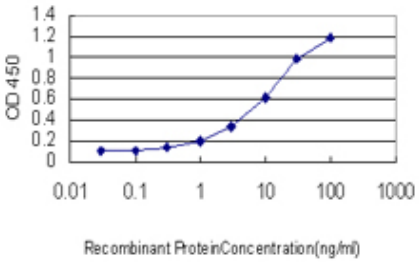
Western Blot analysis of CDK4 expression in transfected 293T cell line by CDK4 monoclonal antibody (M03), clone 4F11.

Lane 1: CDK4 transfected lysate(33.7 KDa).
Lane 2: Non-transfected lysate.

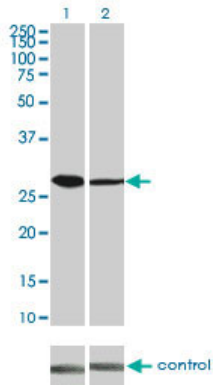




Immunofluorescence of monoclonal antibody to CDK4 on HeLa cell. [antibody concentration 10 ug/ml]



Detection limit for recombinant GST tagged CDK4 is approximately 1ng/ml as a capture antibody.



Western blot analysis of CDK4 over-expressed 293 cell line, cotransfected with CDK4 Validated Chimera RNAi ((Cat # AT1474a)

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