

Product Name: Cdk4 Rabbit Polyclonal Antibody
Catalog #: APRab08562



Summary

Production Name	Cdk4 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	IF, WB, IHC, ELISA
Reactivity	Human, Mouse, Rat

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	CDK4
Alternative Names	CDK4; Cyclin-dependent kinase 4; Cell division protein kinase 4; PSK-J3
Gene ID	1019.0
SwissProt ID	P11802. The antiserum was produced against synthesized peptide derived from the N-terminal region of human CDK4. AA range: 1-50

Application

Dilution Ratio	IF 1:50-200 WB 1:500 - 1:2000. IHC-p: 1:100-300 ELISA: 1:20000. Not yet tested in other applications.
Molecular Weight	35kD

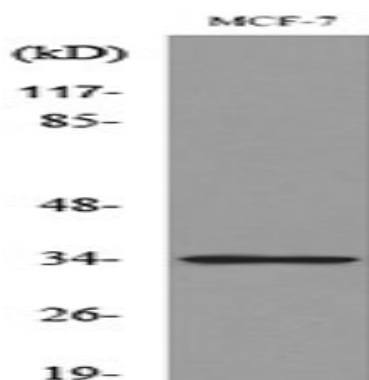
Background

cyclin dependent kinase 4(CDK4) Homo sapiens 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. [provided by RefSeq, Jul 2008],catalytic activity:ATP + a protein = ADP + a phosphoprotein.,disease:CDK4 mutations are involved in tumor formation.,disease:Defects in CDK4 are the cause of cutaneous malignant melanoma 3 (CMM3) [MIM:609048, 155600]. Malignant melanoma is a malignant neoplasm of melanocytes, arising de novo or from a preexisting benign nevus, which occurs most often in the skin but also may involve other sites.,enzyme regulation:Phosphorylation at Thr-172 is necessary for enzymatic activity.,function:Probably involved in the control of the cell cycle.,similarity:Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. CDC2/CDKX subfamily.,similarity:Contains 1 protein kinase domain.,subunit:Forms a stable complex with D-type G1 cyclins. Interacts with SEI1 and ZNF655/VIK.,

Research Area

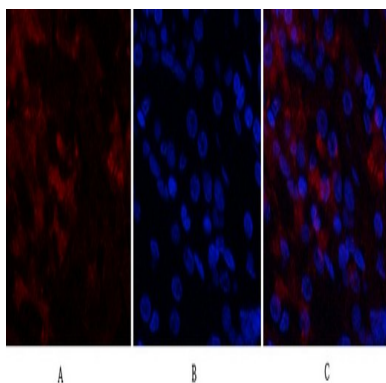
Cell_Cycle_G1S;Cell_Cycle_G2M_DNA;p53;Tight junction;T_Cell_Receptor;Pathways in cancer;Pancreatic cancer;Glioma;Melanoma;Bladder cancer;Chronic myeloid leukemia;Small cell lung cancer;Non-small cell lung cancer;

Image Data

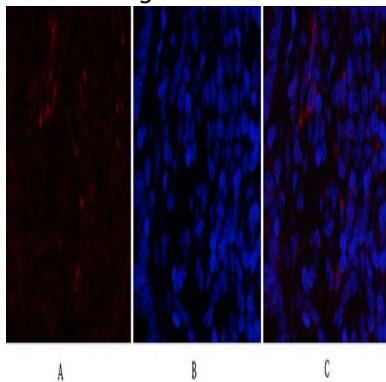


Western blot analysis of lysate from MCF7 cells, using CDK4 Antibody.

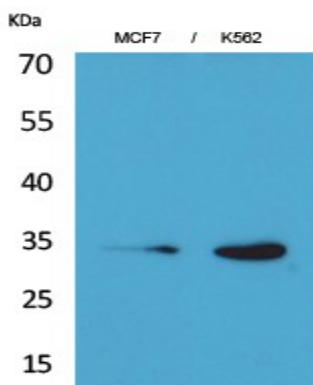
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Immunofluorescence analysis of human-stomach tissue. 1, Cdk4 Polyclonal Antibody (red) was diluted at 1:200 (4°C, overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50min). 3, Picture B: DAPI (blue) 10min. Picture A: Target. Picture B: DAPI. Picture C: merge of A+B

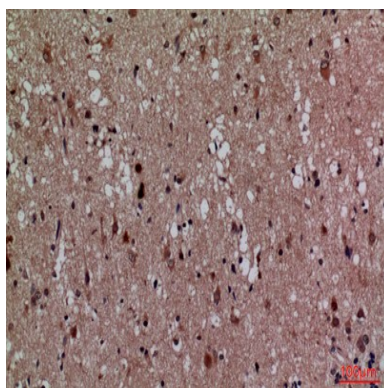


Immunofluorescence analysis of rat-lung tissue. 1, Cdk4 Polyclonal Antibody (red) was diluted at 1:200 (4°C, overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50min). 3, Picture B: DAPI (blue) 10min. Picture A: Target. Picture B: DAPI. Picture C: merge of A+B

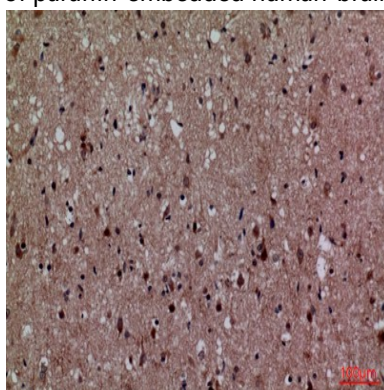


Western Blot analysis of MCF7, K562 cells using Cdk4 Polyclonal Antibody. Secondary antibody was diluted at 1:20000

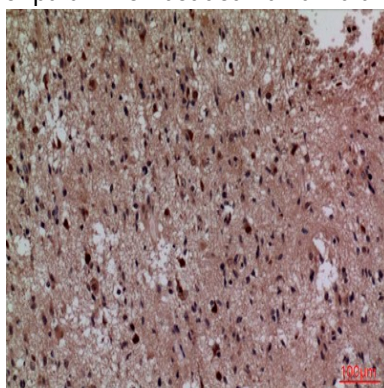
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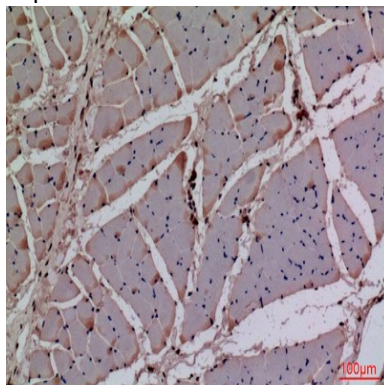
Immunohistochemical analysis of paraffin-embedded human-brain, antibody was diluted at 1:100



Immunohistochemical analysis of paraffin-embedded human-brain, antibody was diluted at 1:100



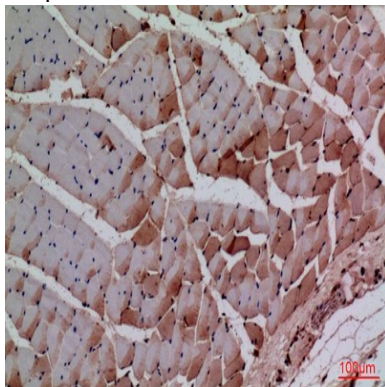
Immunohistochemical analysis of paraffin-embedded human-brain, antibody was diluted at 1:100



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Immunohistochemical analysis of paraffin-embedded rat-muscle, antibody was diluted at 1:100



Immunohistochemical analysis of paraffin-embedded rat-muscle, antibody was diluted at 1:100

Note

For research use only.