# Cdk4 Polyclonal Antibody

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| **Catalog No** | BYab-32387 |
| **Isotype** | IgG |
| **Reactivity** | Human;Mouse;Rat |
| **Applications** | IF;WB;IHC;ELISA |
| **Gene Name** | CDK4 |
| **Protein Name** | Cyclin-dependent kinase 4 |
| **Immunogen** | The antiserum was produced against synthesized peptide derived from the N-terminal region of human CDK4. AA range:1-50 |
| **Specificity** | Cdk4 Polyclonal Antibody detects endogenous levels of Cdk4 protein. |
| **Formulation** | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide. |
| **Source** | Polyclonal, Rabbit,IgG |
| **Purification** | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen. |
| **Dilution** | IF: 1:50-200 Western Blot: 1/500 - 1/2000. IHC-p: 1:100-300 ELISA: 1/20000. Not yet tested in other applications. |
| **Concentration** | 1 mg/ml |
| **Purity** | ≥90% |
| **Storage Stability** | -20°C/1 year |
| **Synonyms** | CDK4; Cyclin-dependent kinase 4; Cell division protein kinase 4; PSK-J3 |
| **Observed Band** | 35kD |
| **Cell Pathway** | Cytoplasm . Nucleus . Nucleus membrane . 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. . |
| **Tissue Specificity** | Brain,Muscle, |
| **Function** | 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 |

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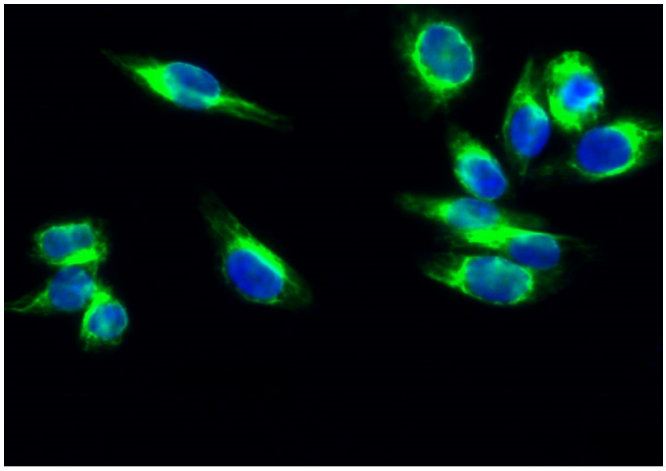
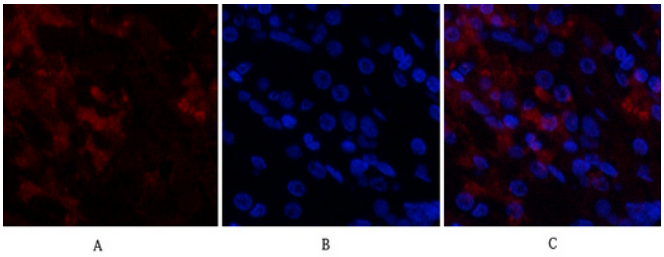
| | kinase family. CDC2/CDKX subfamily.,similarity:Contains 1 protein kinase domain.,subunit:Forms a stable complex with D-type G1 cyclins. Interacts with SEI1 and ZNF655/VIK., |
| **Background** | cyclin dependent kinase 4(CDK4) Homo sapiens The protein encoded by this gene is a member of the Ser/Thr 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], |
| **matters needing attention** | Avoid repeated freezing and thawing! |
| **Usage suggestions** | This product can be used in immunological reaction related experiments. For more information, please consult technical personnel. |

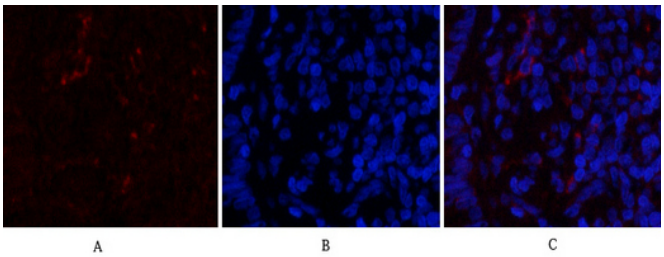
## Products Images



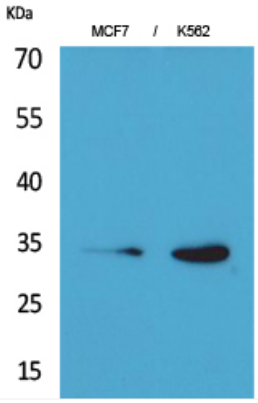
Immunofluorescence analysis of Hela cell. 1,Cdk4 Polyclonal Antibody(green) was diluted at 1:200(4° overnight). 2, Goat Anti Rabbit Alexa Fluor 488 Catalog:RS3211 was diluted at 1:1000(room temperature, 50min). 3 DAPI(blue) 10min.



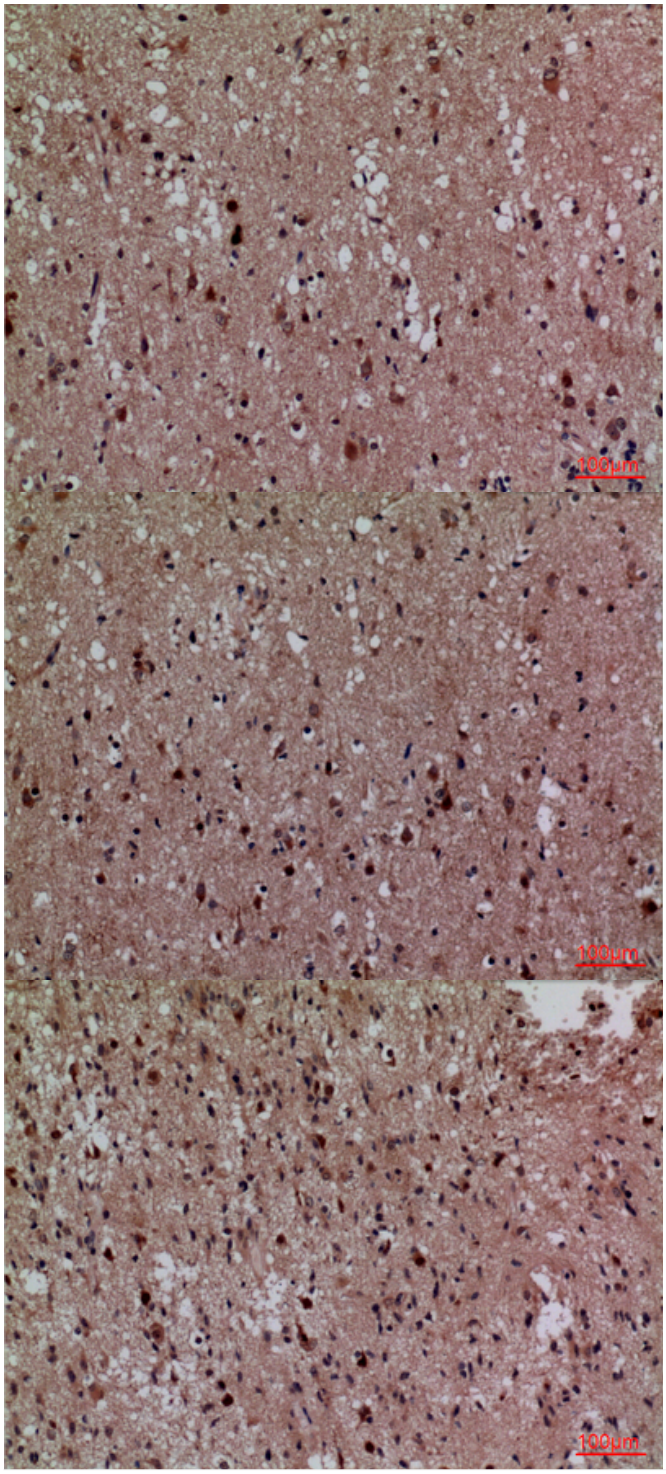

Immunofluorescence analysis of human-stomach tissue. 1,Cdk4 Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



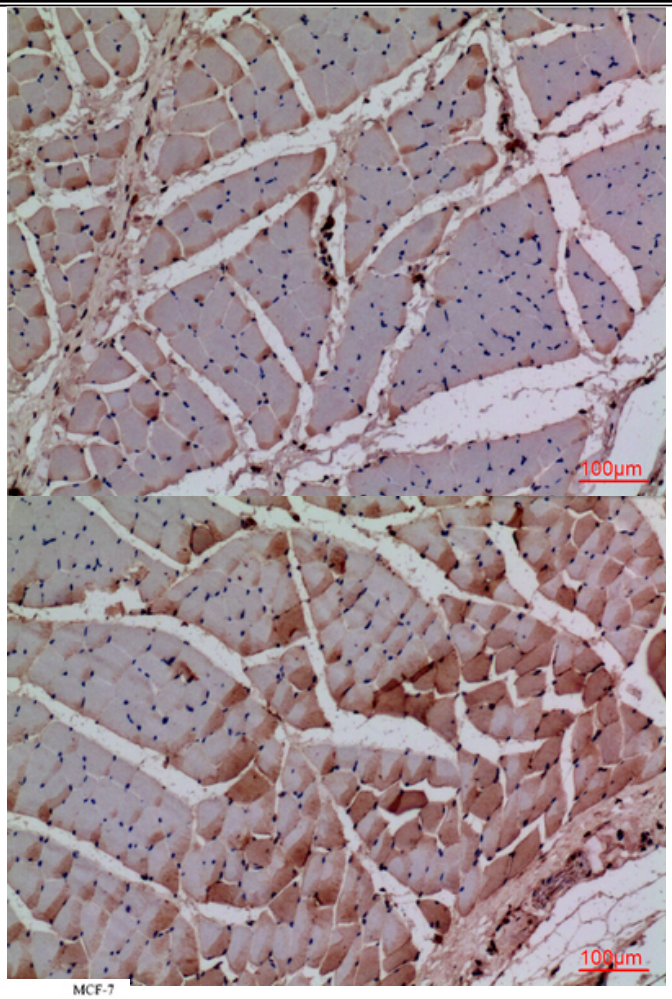

Immunofluorescence analysis of rat-lung tissue. 1,Cdk4 Polyclonal Antibody(red) was diluted at 1:200(4 °C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B

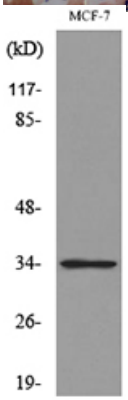



Western Blot analysis of MCF7, K562 cells using Cdk4 Polyclonal Antibody. Secondary antibody(catalog#:RS0002) was diluted at 1:20000




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


100μm
100μm


MCF-7
(kD)
117-
85-
48-
34-
26-
19-