

**bsm-52028M****[ Primary Antibody ]****Cdk4 Mouse mAb****BioSS**  
**ANTIBODIES**

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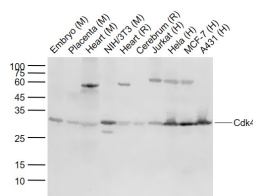
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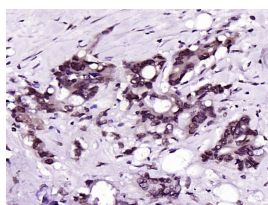
400-901-9800

**— DATASHEET —**

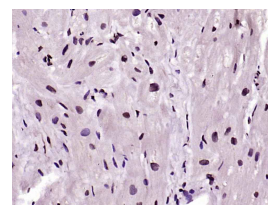
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|--|---|---|
| <b>Host:</b> Mouse<br><b>Clonality:</b> Monoclonal<br><b>GeneID:</b> 1019<br><b>Target:</b> Cdk4<br><b>Purification:</b> affinity purified by Protein A<br><b>Concentration:</b> 1mg/ml<br><b>Storage:</b> 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.<br>Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.<br><b>Background:</b> 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 <i>S. cerevisiae</i> cdc28 and <i>S. pombe</i> 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] | <b>Isotype:</b> IgG<br><b>CloneNo.:</b> 2F6<br><b>SWISS:</b> P11802 | <b>Applications:</b> <b>WB</b> (1:500-2000)<br><b>IHC-P</b> (1:50-200)<br><b>IHC-F</b> (1:50-200)<br><b>IF</b> (1:50-200)<br><b>ICC/IF</b> (1:50-200)<br><b>Reactivity:</b> Human, Mouse, Rat<br><br><b>Predicted MW.:</b> 34 kDa<br><b>Subcellular Location:</b> Cell membrane ,Cytoplasm ,Nucleus |
|--|---|---|

**— VALIDATION IMAGES —**

Sample: Lane 1: Embryo (Mouse) Lysate at 40 ug  
 Lane 2: Placenta (Mouse) Lysate at 40 ug  
 Lane 3: Heart (Mouse) Lysate at 40 ug  
 Lane 4: NIH/3T3 (Mouse) Cell Lysate at 30 ug  
 Lane 5: Heart (Rat) Lysate at 40 ug  
 Lane 6: Cerebrum (Rat) Lysate at 40 ug  
 Lane 7: Jurkat (Human) Cell Lysate at 30 ug  
 Lane 8: Hela (Human) Cell Lysate at 30 ug  
 Lane 9: MCF-7 (Human) Cell Lysate at 30 ug  
 Lane 10: A431 (Human) Cell Lysate at 30 ug  
 Primary: Anti-Cdk4 (bsm-52028M) at 1/1000 dilution  
 Secondary: IRDye800CW Goat Anti-Mouse IgG at 1/20000 dilution  
 Predicted band size: 34 kD  
 Observed band size: 32 kD



Paraformaldehyde-fixed, paraffin embedded (human rectal carcinoma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Cdk4) Monoclonal Antibody, Unconjugated (bsm-52028M) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Mouse)(sp-0024) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (human myocardium); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Cdk4) Monoclonal Antibody, Unconjugated (bsm-52028M) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Mouse)(sp-0024) instructions and DAB staining.

**— SELECTED CITATIONS —**

- **[IF=11.205]** Cong Lan. et al. Inhibition of DYRK1A, via histone modification, promotes cardiomyocyte cell cycle activation and cardiac repair after myocardial infarction. EBIOMEDICINE. 2022 Aug;82:104139 WB ;Rat. 35810562
- **[IF=10.75]** Tian Xiangdong. et al. Autophagy Inhibition Contributes to Apoptosis of PLK4 Downregulation-induced Dormant Cells in Colorectal Cancer. INT J BIOL SCI. 2023 May;19(9):2817-2834 WB ;Human. 37324947

Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

- **[IF=8.469]** Que, Tianshi. et al. HMGA1 stimulates MYH9-dependent ubiquitination of GSK-3 $\beta$  via PI3K/Akt/c-Jun signaling to promote malignant progression and chemoresistance in gliomas. Cell Death Dis. 2021 Dec;12(12):1-12 WB ;Human. 34887392
- **[IF=8.2]** Chun Huang. et al. Whole-transcriptome analysis of longissimus dorsi muscle in cattle-yaks reveals the regulatory functions of ADAMTS6 gene in myoblasts. INT J BIOL MACROMOL. 2024 Mar;262:129985 WB ;Mouse. 38342263
- **[IF=4.5]** Dong-Dong Wang. et al. Identification of diterpenoids from Salvia castanea Diels f. tomentosa Stib and their antitumor activities. BIOORG CHEM. 2024 Aug;:107701 WB ;Human. 39154520