

# **Anti-CDK4 Rabbit Monoclonal Antibody**

Catalog Number: M00159

### **About CDK4**

Phosphoinositide-3-kinase (PI3K) that phosphorylates PtdIns (Phosphatidylinositol), PtdIns4P (Phosphatidylinositol 4-phosphate) and PtdIns (4,5) P2 (Phosphatidylinositol 4,5-bisphosphate) to generate phosphatidylinositol 3,4,5-trisphosphate (PIP3). PIP3 plays a key role by recruiting PH domain-containing proteins to the membrane, including AKT1 and PDPK1, activating signaling cascades involved in cell growth, survival, proliferation, motility and morphology. Participates in cellular signaling in response to various growth factors.

### Overview

Product Name	Anti-CDK4 Rabbit Monoclonal Antibody
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-CDK4 Rabbit Monoclonal Antibody catalog # M00159. Tested in WB, ICC/IF, IP applications. This antibody reacts with Human, Mouse, Rat.
Application	IP, IF, ICC, WB
Clonality	Monoclonal HOB-3
Formulation	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
Storage Instructions	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P11802

### **Technical Details**

Immunogen	A synthesized peptide derived from human CDK4
Isotype	Rabbit IgG
Form	Liquid
Concentration	Actual concentration vary by lot. Use suggested dilution ratio to decide dilution procedure.
Purification	Affinity-chromatography
Suggested Dilutions	Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.  If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.  Some PubMed article(s) citing the expression level of this target are as follows:



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Boster Bio's internal QC testing used:
WB 1:1000-1:2000
ICC/IF 1:50-1:200
IP 1:50



### Anti-CDK4 Rabbit Monoclonal Antibody (M00159) Images

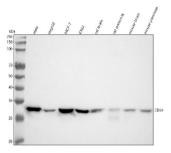


Figure 1. Western blot analysis of CDK4 using anti-CDK4 antibody (M00159).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human Hela whole cell lysates,

Lane 2: human HepG2 whole cell lysates,

Lane 3: human MCF-7 whole cell lysates,

Lane 4: human K562 whole cell lysates,

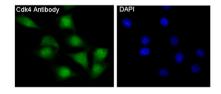
Lane 5: rat brain tissue lysates,

Lane 6: rat pancreas tissue lysates,

Lane 7: mouse brain tissue lysates,

Lane 8: mouse pancreas tissue lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-CDK4 antigen affinity purified monoclonal antibody (Catalog # M00159) at 1:1000 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:1000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for CDK4 at approximately 34 kDa. The expected band size for CDK4 is at 34 kDa.



Immunofluorescent analysis of NIH/3T3 cells, using CDK4 Antibody.

## **3 Publications Citing This Product**

- 1. PubMed ID: -, Lu Kong, Yongya Wu, Wangcheng Hu, Lin Liu, Yuying Xue, Geyu Liang, Mechanisms underlying reproductive toxicity induced by nickel nanoparticles identified by comprehensive gene expression analysis in GC-1 spg cells, Environmental Pollution, 2021, 116556, ISSN 0269-7
- 2. PubMed ID: 24788349, Zhang H, Zhao B, Huang C, Meng Xm, Bian Eb, Li J. Plos One. 2014 May 2;9(5):E95520. Doi: 10.1371/Journal.Pone.0095520. Ecollection 2014. Melittin Restores Pten Expression By Down-Regulating Hdac2 In Human Hepatocelluar Carcinoma Hepg2 Cells.
- 3. PubMed ID: 22359486, Effect of Bone Morphogenetic Protein-2 on Proliferation and Apoptosis of Gastric Cancer Cells

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