BOSTER
antibody and ELISA experts

BOSTER BIOLOGICAL TECHNOLOGY
3942 B Valley Ave, Pleasanton, CA 94566
888-466-3604 | support@bosterbio.com | www.bosterbio.com

Anti-CDK4 Rabbit Monoclonal Antibody

Catalog Number: M00159

Overview

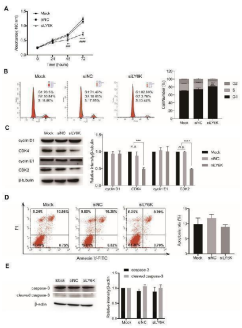
Product Name	Anti-CDK4 Rabbit Monoclonal Antibody
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-CDK4 Rabbit Monoclonal Antibody catalog # M00159. Tested in WB, ICC/IF, IP applications. This antibody reacts with Human, Mouse, Rat.
Application	IP, IF, ICC, WB
Clonality	Monoclonal HOB-3
Formulation	Rabbit IgG in stabilizing components, phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. *This antibody is supplied in a stabilized formulation. Compatibility with conjugation reactions depends on the chemistry of the conjugation method used. For conjugation methods that are not compatible with the stabilizing components present in this formulation, a carrier-free antibody format is required.
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

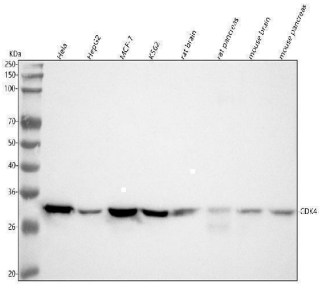
Immunogen	A synthesized peptide derived from human CDK4
Isotype	Rabbit IgG
Form	Liquid
Concentration	0.5mg/ml
Purification	Affinity-chromatography
Suggested Dilutions	WB 1:500-2000 ICC/IF 1:50-200 IP 1:20

BOSTER BIOLOGICAL TECHNOLOGY
3942 B Valley Ave, Pleasanton, CA 94566
888-466-3604 | support@bosterbio.com | www.bosterbio.com

Anti-CDK4 Rabbit Monoclonal Antibody (M00159) Images



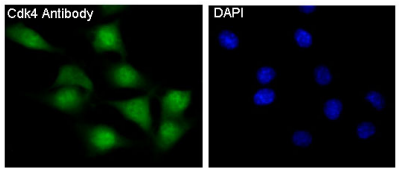
LY6K knockdown inhibits cell proliferation by causing cell-cycle arrest in the G1-phase. (A) MTS assays showing the proliferation potential of CCSCs after siLY6K transfection. Values are the mean ± SE (n = 3). ** p < 0.01 or **** p < 0.0001 and ### p < 0.001 or #### p < 0.0001 indicate significant differences from the Mock and siNC groups, respectively, as assessed by one-way ANOVA with Tukey–Kramer multiple comparisons tests. (B) Flow cytometric analyses showing the cell-cycle progression in CCSCs and number of CCSCs in each cell-cycle phase. Values are the mean ± SE (n = 3). ## p < 0.01 and *** p < 0.001 indicate significant differences from the Mock and siNC groups, respectively, as assessed by one-way ANOVA with Tukey–Kramer multiple comparisons tests. (C) Western blot analyses showing the protein levels of cyclin D1, CDK4, cyclin E1, and CDK2 in CCSCs after treatment with siLY6K or siNC for 48 h. Values are the mean ± SE (n = 3). *** p < 0.001 or **** p < 0.0001 indicates significant differences from the Mock and siNC groups as assessed by one-way ANOVA with Tukey–Kramer multiple comparisons tests. (D) Flow cytometric analyses of Annexin V-FITC/PI staining of CCSCs following siLY6K or siNC transfection for 48 h. Values are the mean ± SE (n = 3). Lower-left quadrant: viable cells; upper-right and lower-right quadrants: apoptotic cells; upper-left quadrants: necrotic cells. (E) Western blot analyses showing the protein levels of caspase-3 and cleaved caspase-3 in CCSCs after treatment with siLY6K or siNC for 48 h. Values are the mean ± SE (n = 3). LY6K, lymphocyte antigen 6, locus K; CCSC, colon cancer stem cells; CDK, cyclin-dependent kinase; PI, propidium iodide; FITC, fluorescein isothiocyanate; n.s., not significant. Index in PubMed under a CC BY license. PMID: 39727968



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

BOSTER BIOLOGICAL TECHNOLOGY
3942 B Valley Ave, Pleasanton, CA 94566
888-466-3604 | support@bosterbio.com | www.bosterbio.com

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

Visit bosterbio.com/anti-cdk4-rabbit-monoclonal-antibody-m00159-boster.html to see all 3 publications.

Submit a product review to Biocompare.com

Submit a review of this product to Biocompare.com to receive a $20 Amazon.com giftcard! Your reviews help your fellow scientists make the right decisions. Thank you for your contribution.

Anti-CDK4 Rabbit Monoclonal Antibody

For Research Use Only. Not for use in diagnostic procedures.