

## Anti-Cyclin D1 CCND1 Rabbit Monoclonal Antibody

Catalog Number: M00149-1

### About CCND1

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-Cyclin D1 CCND1 Rabbit Monoclonal Antibody
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-Cyclin D1 CCND1 Rabbit Monoclonal Antibody catalog # M00149-1. Tested in WB, IHC, ICC/IF, IP applications. This antibody reacts with Human, Mouse, Rat.
Application	IP, IF, IHC, ICC, WB
Clonality	Monoclonal DAD-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	P24385

### Technical Details

Immunogen	A synthesized peptide derived from human Cyclin D1
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:

Boster Bio's internal QC testing used:

WB 1:1000-1:5000

IHC 1:50-1:200

ICC/IF 1:50-1:100

IP 1:50

## Anti-Cyclin D1 CCND1 Rabbit Monoclonal Antibody (M00149-1) Images

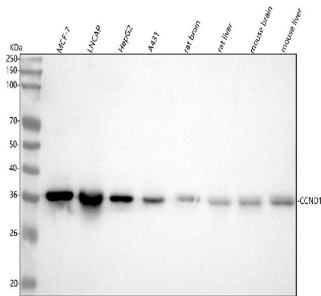


Figure 1. Western blot analysis of Cyclin D1 using anti-Cyclin D1 antibody (M00149-1).

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 MCF-7 whole cell lysates,

Lane 2: human LNCAP whole cell lysates,

Lane 3: human HepG2 whole cell lysates,

Lane 4: human A431 whole cell lysates,

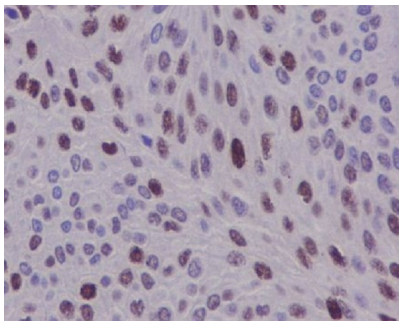
Lane 5: rat brain tissue lysates,

Lane 6: rat liver tissue lysates,

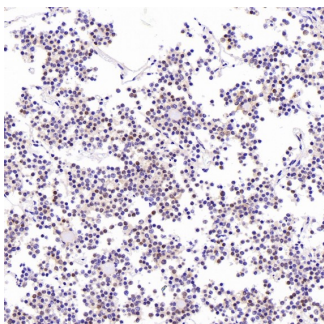
Lane 7: mouse brain tissue lysates,

Lane 8: mouse liver 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-Cyclin D1 antigen affinity purified monoclonal antibody (Catalog # M00149-1) 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 Cyclin D1 at approximately 34 kDa. The expected band size for Cyclin D1 is at 34 kDa.

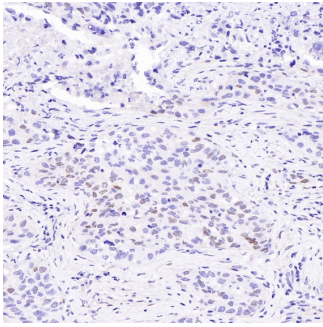


Immunohistochemical analysis of paraffin-embedded human bladder, using Cyclin D1 Antibody.

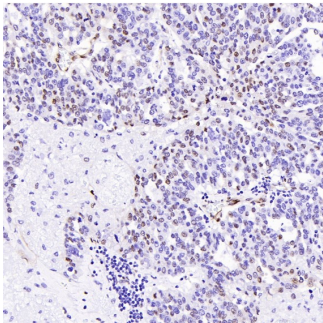


Immunohistochemical analysis of paraffin-embedded Human pituitary tumor, using the Antibody at 1:100 dilution.

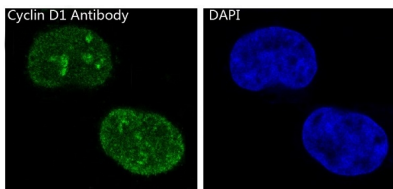
Immunohistochemical analysis of paraffin-embedded Human



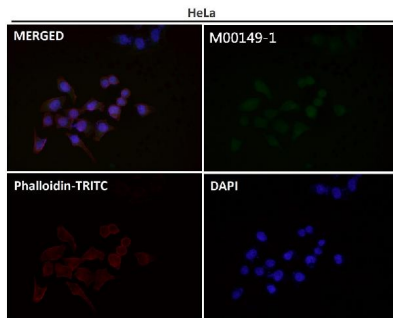
squamous cell carcinoma , using the Antibody at 1:100 dilution.



Immunohistochemical analysis of paraffin-embedded Human ovarian cancer, using the Antibody at 1:500 dilution.



Immunofluorescent analysis of MCF-7 cells, using Cyclin D1 Antibody.



Immunofluorescent analysis using the Antibody at 1:50 dilution.

## 27 Publications Citing This Product

1. PubMed ID: 31467112, Chen Q, Deng X, Hu X, Guan S, He M, Wang Y, Wei B, Zhang J, Zhao H, Yao W, Jin F, Liu Y, Chen J, Olapade OI, Wu H, Wei M. Breast Cancer Risk-Associated SNPs in the mTOR Promoter Form De Novo KLF5- and ZEB1-Binding Sites that Influence the Cellular Response to Paclitaxel. *Mol Cancer Res.* 2019 Nov;17(11):2244-2256. doi:10.1158/1541-7786.MCR-18-1072. Epub 2019 Aug 29. PMID:31467112.
2. PubMed ID: 30610869, Xiang W, Jiang T, Hao X, Wang R, Yao X, Sun K, Guo F, Xu T. Primary cilia and autophagy interaction is involved in mechanical stress mediated cartilage development via ERK/mTOR axis. *Life Sci.* 2019 Feb 1;218:308-313. doi:10.1016/j.lfs.2019.01.001. Epub 2019 Jan 3. PMID:30610869.
3. PubMed ID: 31102746, Zhang H, Su Y, Wang J, Gao Y, Yang F, Li G, Shi Q. Ginsenoside Rb1 promotes the growth of mink hair follicle via PI3K/AKT/GSK-3beta signaling pathway. *Life Sci.* 2019 Jul 15;229:210-218. doi:10.1016/j.lfs.2019.05.033. Epub 2019 May 16. PMID:31102746.

Visit [bosterbio.com/anti-cyclin-d1-rabbit-monoclonal-antibody-m00149-1-boster.html](https://bosterbio.com/anti-cyclin-d1-rabbit-monoclonal-antibody-m00149-1-boster.html) to see all 27 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-Cyclin D1 CCND1 Rabbit Monoclonal Antibody