

## Anti-CDK2 Rabbit Monoclonal Antibody

Catalog Number: M00166

### About CDK2

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-CDK2 Rabbit Monoclonal Antibody                                                                                                                       |
| Reactive Species     | Human, Mouse, Rat                                                                                                                                          |
| Description          | Boster Bio Anti-CDK2 Rabbit Monoclonal Antibody catalog # M00166. Tested in WB, IHC, ICC/IF, IP applications. This antibody reacts with Human, Mouse, Rat. |
| Application          | IP, IF, IHC, ICC, WB                                                                                                                                       |
| Clonality            | Monoclonal GD-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           | P24941                                                                                                                                                     |

### Technical Details

|                     |                                                                                                                                                                                                                                                                                                                                                |
|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Immunogen           | A synthesized peptide derived from human Cdk2                                                                                                                                                                                                                                                                                                  |
| 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.<br>If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.<br>Some PubMed article(s) citing the expression level of this target are as follows: |

Boster Bio's internal QC testing used:

WB 1:500-1:1000

IHC 1:50-1:100

ICC/IF 1:50-1:200

IP 1:30

## Anti-CDK2 Rabbit Monoclonal Antibody (M00166) Images

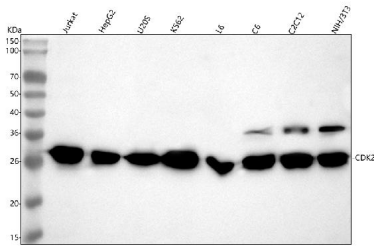


Figure 1. Western blot analysis of CDK2 using anti-CDK2 antibody (M00166).

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 Jurkat whole cell lysates,

Lane 2: human HepG2 whole cell lysates,

Lane 3: human U2OS whole cell lysates,

Lane 4: human K562 whole cell lysates,

Lane 5: rat L6 whole cell lysates,

Lane 6: rat C6 whole cell lysates,

Lane 7: mouse C2C12 whole cell lysates,

Lane 8: mouse NIH/3T3 whole cell lysates.

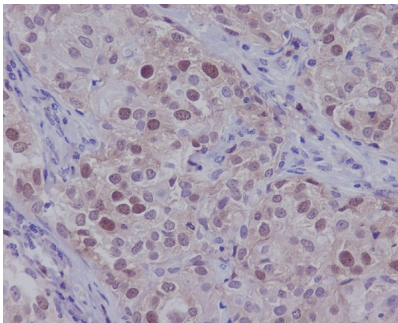
After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes.

Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT.

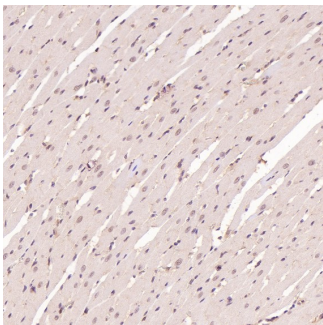
The membrane was incubated with rabbit anti-CDK2 antigen affinity purified monoclonal antibody (Catalog # M00166) at 1:500 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed

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 CDK2 at approximately 30 kDa. The expected band size for CDK2 is at 34 kDa.

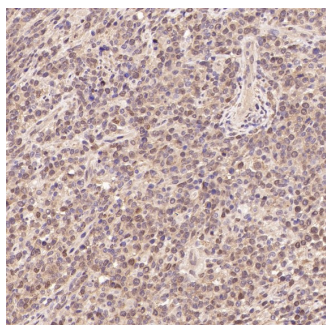
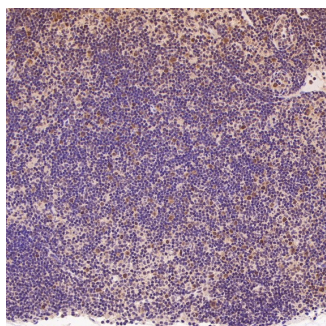


Immunohistochemical analysis of paraffin-embedded human breast carcinoma, using CDK2 Antibody.

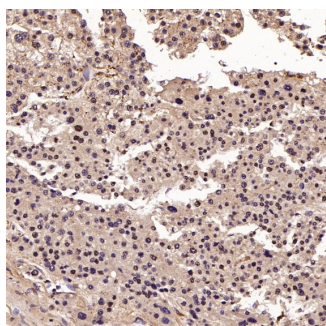


Immunohistochemical analysis of paraffin-embedded Rat heart, using the Antibody at 1:200 dilution.

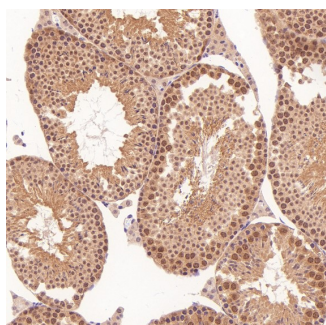
Immunohistochemical analysis of paraffin-embedded Rat pancreas, using the Antibody at 1:200 dilution.



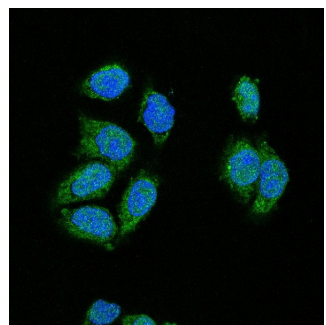
Immunohistochemical analysis of paraffin-embedded Human non-Hodgkin's lymphoma, using the Antibody at 1:100 dilution.



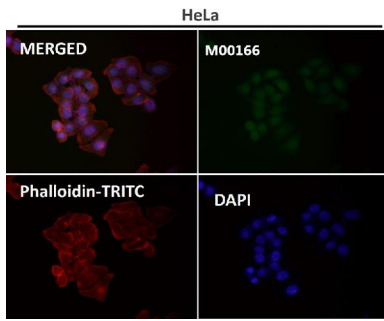
Immunohistochemical analysis of paraffin-embedded Human liver cancer, using the Antibody at 1:100 dilution.



Immunohistochemical analysis of paraffin-embedded Mouse testis, using the Antibody at 1:100 dilution.



Immunofluorescent analysis of Hela cells, using CDK2 Antibody .



Immunofluorescent analysis using the Antibody at 1:150 dilution.

## 5 Publications Citing This Product

1. PubMed ID: 27432230, Platycodin D, a metabolite of Platycodin grandiflorum, inhibits highly metastatic MDA-MB-231 breast cancer growth in vitro and in vivo by targeting the MDM2 %u2026
2. PubMed ID: 30340635, IL-2R%u03B1 up-regulation is mediated by latent membrane protein 1 and promotes lymphomagenesis and chemotherapy resistance in natural killer/T-cell %u2026
3. PubMed ID: 27065079, TALENs-directed?knockout?of the?full-length?transcription?factor?Nrf1? that?represses?malignantbehaviour?of?human?hepatocellular?carcinoma?(HepG2)?cells

Visit [bosterbio.com/anti-cdk2-rabbit-monoclonal-antibody-m00166-boster.html](http://bosterbio.com/anti-cdk2-rabbit-monoclonal-antibody-m00166-boster.html) to see all 5 publications.

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