

Anti-Cyclin-dependent kinase 2 Cdk2 Antibody Picoband®

Catalog Number: PA1547

About CDK2

CDK2, Cyclin-Dependent Kinase2, is also known as P33. The CDK2 protein was highly homologous to p34 (CDC2) kinase and more significantly homologous to *Xenopus* Eg1 kinase, suggesting that CDK2 is the human homolog of Eg1. The CDK2 gene is mapped to 12q13, the same region to which the CDK4 gene maps. Human cyclin A binds independently to 2 kinases, p34 (cdc2) or p33. In adenovirus-transformed cells, the viral E1A oncoprotein seems to associate with p33/cyclin A but not with p34 (cdc2)/cyclin A. The gene for p33 shares 65% sequence identity with p34 (cdc2). P33 (cdk2) plays a unique role in cell cycle regulation of vertebrate cells.

Overview

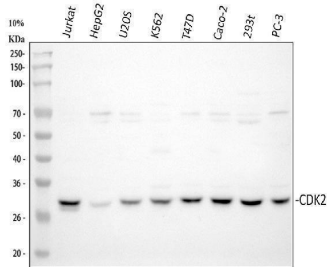
Product Name	Anti-Cyclin-dependent kinase 2 Cdk2 Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-Cyclin-dependent kinase 2 Cdk2 Antibody catalog # PA1547. Tested in WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl and 0.2 mg Na ₂ HPO ₄ .
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P24941

Technical Details

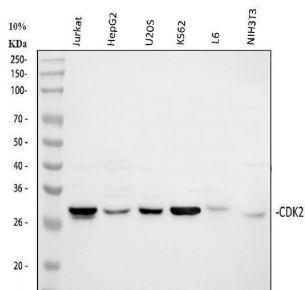
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human Cdk2, identical to the related rat and mouse sequences.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot.
Cross Reactivity	No cross-reactivity with other proteins
Isotype	Rabbit IgG
Form	Lyophilized

Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.1-0.5ug/ml, Human, Mouse, Rat

Anti-Cyclin-dependent kinase 2 Cdk2 Antibody Picoband® (PA1547) Images



Western blot analysis of CDK2 using antiCDK2 antibody (PA1547). 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: human T47D whole cell lysates, Lane 6: human CACO-2 whole cell lysates, Lane 7: human 293T whole cell lysates, Lane 8: human PC-3 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 polyclonal antibody (Catalog # PA1547) at 0.5 ug/mL 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 1:5000 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 30, 34 kDa.



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15 Publications Citing This Product

1. PubMed ID: 10.1016/j.jgr.2021.06.002, The anti-tumor efficacy of 20(S)-protopanaxadiol, an active metabolite of ginseng, according to fasting on hepatocellular carcinoma
2. PubMed ID: -, Wenzhen Li, Yifan Wang, Xinbo Zhou, Xiaohong Pan, Junhong Lü, Hongliu Sun, Zeping Xie, Shayan Chen, Xue Gao, The anti-tumor

efficacy of 20(S)-protopanaxadiol, an active metabolite of ginseng, according to fasting on hepatocellular carcinoma, Journal of Ginseng Research, 2021, ISSN 1226-8453, <https://doi.org/10.1016/j.jgr.2021.06.002>.

3. 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

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