

Datasheet for ABIN2854978

anti-CDK2 antibody[Go to Product page](#)

2 Images

1 Publication

Overview

Quantity:	100 µL
Target:	CDK2
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This CDK2 antibody is un-conjugated
Application:	Western Blotting (WB)

Product Details

Immunogen:	Recombinant protein encompassing a sequence within the center region of human CDK2. The exact sequence is proprietary.
Isotype:	IgG
Cross-Reactivity:	Human, Killifish (<i>Oryzias latipes</i>)
Characteristics:	Rabbit polyclonal antibody to CDK2 (cyclin-dependent kinase 2) CDK2 antibody [N1C3]
Purification:	Purified by antigen-affinity chromatography.
Grade:	KO Validated

Target Details

Target:	CDK2
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Target Details

Alternative Name:	cyclin dependent kinase 2 (CDK2 Products)
Background:	The protein encoded by this gene is a member of the Ser/Thr protein kinase family. This protein kinase is highly similar to the gene products of <i>S. cerevisiae</i> cdc28, and <i>S. pombe</i> cdc2. It is a catalytic subunit of the cyclin-dependent protein kinase complex, whose activity is restricted to the G1-S phase, and essential for cell cycle G1/S phase transition. This protein associates with and regulated by the regulatory subunits of the complex including cyclin A or E, CDK inhibitor p21Cip1 (CDKN1A) and p27Kip1 (CDKN1B). Its activity is also regulated by its protein phosphorylation. Two alternatively spliced variants and multiple transcription initiation sites of this gene have been reported.
Molecular Weight:	34 kDa
Gene ID:	1017
UniProt:	P24941
Pathways:	PI3K-Akt Signaling , Cell Division Cycle , Mitotic G1-G1/S Phases , DNA Replication , M Phase , Synthesis of DNA

Application Details

Application Notes:	WB: 1:500-1:10000. Optimal dilutions/concentrations should be determined by the researcher. Not tested in other applications.
Comment:	Positive Control: human CD2K-transfected 293T cells Validation: KO/KD, Orthogonal, Overexpression
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	1 mg/mL
Buffer:	1XPBS (pH 7), 20 % Glycerol, 0.01 % Thimerosal
Preservative:	Thimerosal (Merthiolate)
Precaution of Use:	This product contains Thimerosal (Merthiolate): a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C

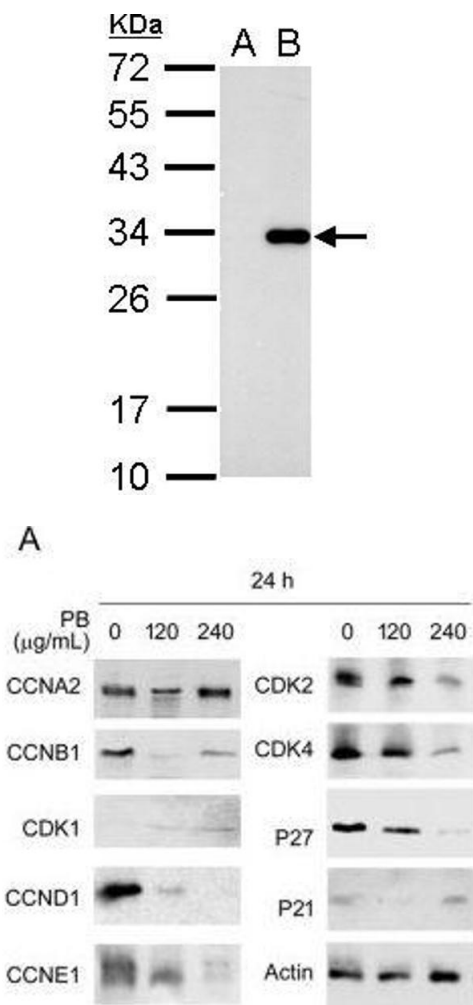
Handling

Storage Comment: Store as concentrated solution. Centrifuge briefly prior to opening vial. For short-term storage (1-2 weeks), store at 4°C. For long-term storage, aliquot and store at -20°C or below. Avoid multiple freeze-thaw cycles.

Publications

Product cited in: Sarin, Engel, Rothweiler, Cinatl, Michaelis, Frötschl, Fröhlich, Kalayda: "Key Players of Cisplatin Resistance: Towards a Systems Pharmacology Approach." in: **International journal of molecular sciences**, Vol. 19, Issue 3, (2018) ([PubMed](#)).

Images



Western Blotting

Image 1. WB Image CDK2 antibody [N1C3] detects CDK2 protein by western blot analysis. A. 30 ug 293T whole cell lysate/extract B. 30 ug whole cell lysate/extract of human CD2K-transfected 293T cells 12 % SDS-PAGE CDK2 antibody [N1C3] , dilution: 1:5000

Western Blotting

Image 2. PB downregulates several proteins related to cell cycle progression, morphology, cell-cell adhesion and cell migration. Hep3B cells were treated for 24h (A), 6h (C), and 24h and 48h (F) with the indicated concentrations of PB. Levels of protein expression were analysed by Western blot using indicated antibodies. Images were cropped from different blots run under the same experimental conditions in each panel. The original blots were attached as Supplementary Figure 6. (B) Hep3B cells were treated for 8 or 24h with 120 or 240 µg/mL PB. Cell cycle distribution was evaluated using propidium iodide (PI) staining. (D,E) Hep3B cells were treated for 6h with PB (120 µg/mL), paclitaxel

(PTX) (2.0 μ M). Localisation of β -tubulin, F-actin and ezrin was imaged using a confocal microscope (Leica SP8). Differential expression of indicated molecules was compared. *P<0.05, **P<0.01, ***P<0.001, control versus PB- or drug-treated cells. (G) Hep3B cells were treated for 1h with indicated concentration of PB and adhered to the bottom of the plates. Adhesive cells were photographed and counted. (H) Hep3B cells were treated for 24h with PB (60-240 μ g/mL), the corresponding concentration of polyphenols GA, DHBA, and CA, along or in combination, or water control. Migration analysis was performed using a Boyden chamber. Migrated cells were measured as a percentage of cells that migrated to the lower surface of the chamber. Data are presented from three independent experiments. **P<0.01, ***P<0.001, control versus PB- or drug-treated cells. - figure provided by CiteAb. Source: PMID28134285