

Datasheet for ABIN967705
anti-CDK1 antibody (AA 283-297)



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Overview

Quantity:	150 µg
Target:	CDK1
Binding Specificity:	AA 283-297
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Clonality:	Monoclonal
Application:	Western Blotting (WB), Immunofluorescence (IF), Immunoprecipitation (IP), Immunohistochemistry (Formalin-fixed Sections) (IHC (f))

Product Details

Immunogen:	Human p34 [cdc2] aa. 283-297
Clone:	1-Cdk1-Cdc2
Isotype:	IgG1
Cross-Reactivity:	Mouse (Murine), Rat (Rattus)
Characteristics:	<ol style="list-style-type: none"> 1. Since applications vary, each investigator should titrate the reagent to obtain optimal results. 2. Please refer to us for technical protocols. 3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing. 4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
Purification:	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity

Product Details

chromatography.

Target Details

Target:	CDK1
Alternative Name:	Cdk1 (CDK1 Products)
Background:	<p>Cdk1, also known as p34 [cdc2], is a ubiquitously expressed serine/threonine protein kinase. Cdk1/cdc2 has been identified as the catalytic subunit of the maturation-promoting factor (MPF), while cyclin B acts as the regulatory subunit. The binding of these two subunits is critical to the transition into M-phase of the mammalian cell cycle, and this factor's role is regulated by a series of phosphorylations and dephosphorylations. After binding to cyclin B, cdk1/cdc2 is phosphorylated on Thr-14, by Myt1, and Tyr-15, by wee1 or mik1, yielding an inactive pre-MPF complex. Phosphorylation of cdk1/cdc2 on Thr-161 is performed by a cdk7/cyclin H complex and is necessary for activation of the cdc2 complex. Dephosphorylation of Thr-14 and Tyr-15 by CDC25 occurs at the prophase/metaphase transition and completes activation of the cdc2/cyclin B complex, initiating the cell's entry into mitosis. This antibody is routinely tested by western blot analysis.</p> <p>Synonyms: Cdc2, p34</p>
Molecular Weight:	34 kDa
Pathways:	Cell Division Cycle , Fc-epsilon Receptor Signaling Pathway , Neurotrophin Signaling Pathway , Activation of Innate immune Response , Mitotic G1-G1/S Phases , DNA Replication , M Phase , Toll-Like Receptors Cascades , Synthesis of DNA

Application Details

Comment:	Related Products: ABIN968535 , ABIN967389
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	250 µg/mL
Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09 % sodium azide.
Preservative:	Sodium azide

Handling

Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
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Storage:	-20 °C
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Storage Comment:	Store undiluted at -20° C.
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Publications

Product cited in:

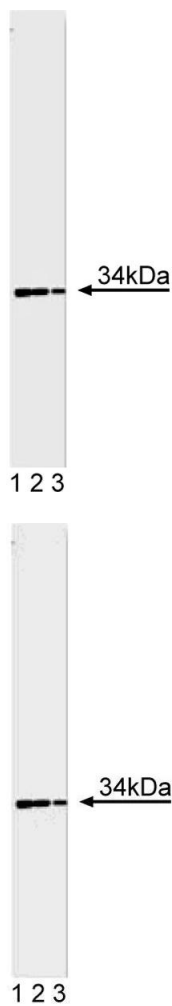
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Takasaki, Kogure, Takeuchi, Kaneda, Yano, Hirokawa, Hirose, Shirai, Hashimoto: "Reactivity of anti-proliferating cell nuclear antigen (PCNA) murine monoclonal antibodies and human autoantibodies to the PCNA multiprotein complexes involved in cell proliferation." in: **Journal of immunology (Baltimore, Md. : 1950)**, Vol. 166, Issue 7, pp. 4780-7, (2001) ([PubMed](#)).

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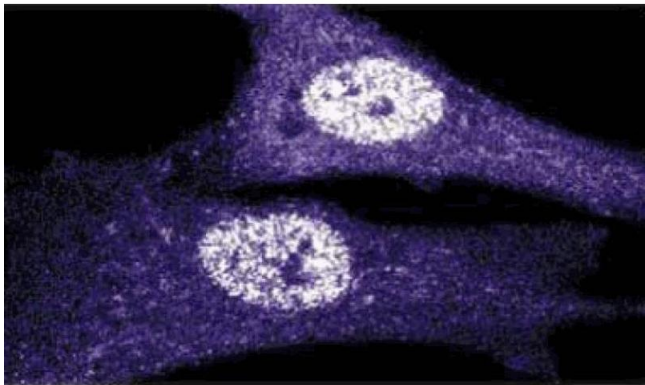


Western Blotting

Image 1.

Western Blotting

Image 2. Western blot analysis of Cdk1 on a HeLa cell lysate. Lane 1: 1:2500, lane 2: 1:5000, lane 3: 1:10000 dilution of the anti- Cdk1 antibody.



Immunofluorescence

Image 3. Immunofluorescence staining of human fibroblasts.

Please check the [product details page](#) for more images. Overall 4 images are available for ABIN967705.