

Datasheet for ABIN969034

anti-CDK1 antibody

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Overview

Quantity:	100 µL
Target:	CDK1
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This CDK1 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Flow Cytometry (FACS), Immunocytochemistry (ICC)

Product Details

Immunogen:	Purified recombinant fragment of CDC2 expressed in E. coli.
Clone:	8C5A7F10
Isotype:	IgG1
Purification:	purified

Target Details

Target:	CDK1
Alternative Name:	CDC2 (CDK1 Products)
Background:	Description: The cell division control protein cdc2, also known as cyclin-dependent kinase 1 (Cdk1) or p34/cdk1, plays a key role in the control of the eukaryotic cell cycle, where it is required for entry into S-phase and mitosis. Cdc2 exists as a complex with both cyclin A and cyclin B. The best characterized of these associations is the Cdc2 p34 cyclin B complex, which

Target Details

is required for the G2 to M phase transition. Activation of Cdc2 is controlled at several steps including cyclin binding and phosphorylation of threonine 161. However, the critical regulatory step in activating cdc2 during progression into mitosis appears to be dephosphorylation of Tyr15 and Tyr14. Phosphorylation at Tyr15 and inhibition of Cdc2 is carried out by WEE1 and MIK protein kinases while Tyr15 dephosphorylation and activation of Cdc2 is carried out by the cdc25 phosphatase. The isoform CDC2deltaT is found in breast cancer tissues. Furthermore, cdc2/Cdk1 is a key mediator of neuronal cell death in brain development and degeneration.

Aliases: CDC2, CDC28A, P34CDC2, MGC111195, DKFZp686L20222, CDK1

Molecular Weight:	34 kDa
Gene ID:	983
HGNC:	983
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

Application Notes:	ELISA: 1:10000, WB: 1:500 - 1:2000, ICC: 1:200 - 1:1000, FCM: 1:200 - 1:400
Restrictions:	For Research Use only

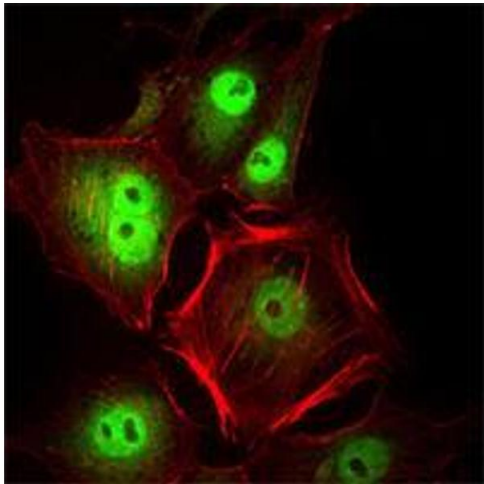
Handling

Format:	Liquid
Buffer:	Ascitic fluid containing 0.03 % sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C/-20 °C
Storage Comment:	4°C, -20°C for long term storage

Publications

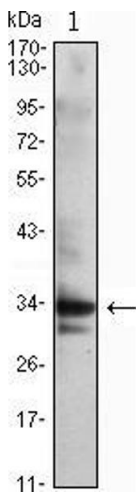
Product cited in:	Wang, Wu, Zhou, Guo, Zheng, Wang, Bi, Liu, Zhou, Guo, Sha: "Mapping of the N-linked glycoproteome of human spermatozoa." in: Journal of proteome research , Vol. 12, Issue 12,
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Images



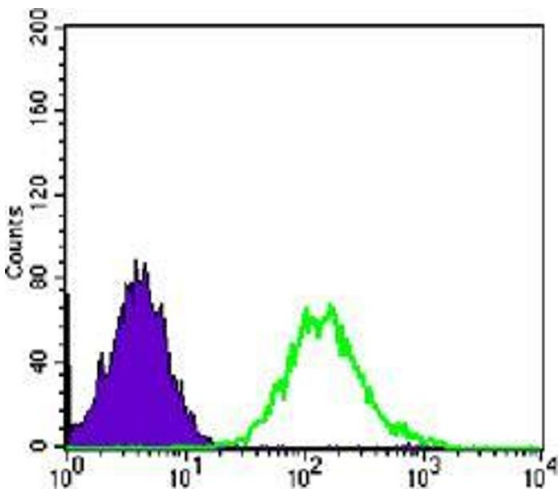
Immunofluorescence

Image 1. Immunofluorescence analysis of HeLa cells using CDC2 mouse mAb (green). Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.



Western Blotting

Image 2. Western blot analysis using CDC2 mouse mAb against Jurkat (1) cell lysate.



Flow Cytometry

Image 3. Flow cytometric analysis of PC-2 cells using CDC2 mouse mAb (green) and negative control (purple).