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# **Mouse Monoclonal Antibody to CDC2**

	Order Iı	nformation
Catalog#	30038	
Size/Concentration	100µl	50µl
Price(¥)	2180	1280

### 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 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 dephosphorylation and activation 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.

### Specification

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

Entrez GeneID : 983

Swissprot : P06493

clone : 8C5A6

WB Predicted band size : 34kDa

Host/Isotype : Mouse IgG1

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Species Reactivity : Human

Immunogen : Purified recombinant fragment of CDC2 expressed in E. Coli. Formulation : Ascitic fluid containing 0.03% sodium azide.

	Application	
WB	1/500 - 1/2000	
IHC	1/200 - 1/1000	
ELISA	1/10000	

#### **References**

1. Mol Biol Cell. 2008 Aug;19(8):3536-43.

2. Eur J Cancer. 2009 May;45(8):1466-73.



#### Protocal

WB - www.promab.com/protocol/wb.html IHC - www.promab.com/protocol/ihc.html ICC - www.promab.com/protocol/icc.html HCM - www.promab.com/protocol/hcm.html **Antigen Sequence** is available upon request.



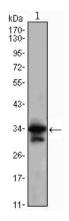


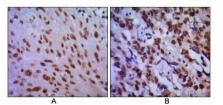
Hybridoma Sequencing

Polyclonal Antibody



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

Immunohistochemical analysis of paraffinembedded human lung cancer (A) and esophageal cancer (B), showing cytoplasmic localization using CDC2 mouse mAb with DAB staining.

