

Product Name: CDC2 Mouse Monoclonal Antibody**Catalog #: AMM80840**

For research use only.

Summary

Description	Mouse monoclonal Antibody
Host	Mouse
Application	WB,IHC,ELISA
Reactivity	Human
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Mouse IgG1
Clonality	Monoclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	PBS containing 0.03% sodium azide.
Purification	Affinity Purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:200-1:1000,ELISA 1:5000-1:20000
Molecular Weight	34kDa

Antigen Information

Gene Name	CDC2
Alternative Names	CDC2; CDC28A; P34CDC2; MGC111195; DKFZp686L20222; CDK1
Gene ID	983.0
SwissProt ID	P06493
Immunogen	Purified recombinant fragment of CDC2 expressed in E. Coli.

Background

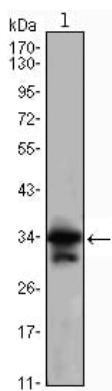
The cell division control protein cdc2, also known as cyclin-dependent kinase 1 (Cdk1) or p34/cdk1, plays a key role in the control of the eukaryotic cell cycle, where it is required for entry into S-phase and mitosis. Cdc2 exists as a complex with both cyclin A and cyclin B. The best characterized of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

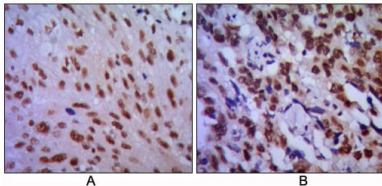
Research Area

Apoptosis

Image Data



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



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