CDC2 Mouse Monoclonal Antibody

E10-30040

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.

Catalog Number: E10-30040

Amount: 100μg/100μl

Clone Number: 8C5A7F10

Species: Mouse IgG1

MW 34kDa

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

Entrez Gene: 983

Immunogen: Purified recombinant fragment of CDC2 expressed in E. Coli.

Storage: Store at 4℃, for long term storage, store at -20℃.

Formulation: Ascitic fluid containing 0.03% sodium azide.

Species Reactivities: Human

Tested Applications: WB, IF, FC, ELISA. Not yet tested in other applications.

Application notes: WB: 1/500 - 1/2000, IF: 1/200-1/1000, FC: 1/200-1/400, ELISA: Propose dilution 1/10000.

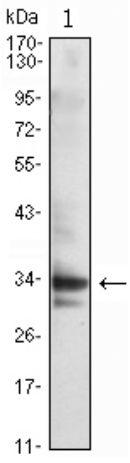

Figure 1: Western blot analysis using CDC2 mouse mAb against Jurkat (1) cell lysate.

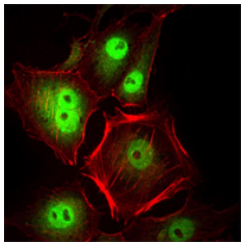

Figure 2: Immunofluorescence analysis of Hela cells using CDC2 mouse mAb (green). Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.

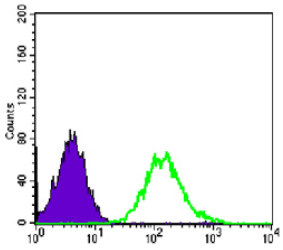

Figure 3: Flow cytometric analysis of PC-2 cells using CDC2 mouse mAb (green) and negative control (purple).

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