

CDK2 Rabbit monoclonal antibody

Catalog: MB66254

Host: Rat

Rabbit

Reactivity: Human, Rat, Hamster

BackGround:

Cyclin-dependent kinase 2 (p33CDK2) is an important component of the cell cycle machinery. Like p34cdc2, kinase activity is regulated by phosphorylation state as well as association with a cyclin subunit and a CDK inhibitor. Inhibitory phosphorylation occurs on Thr14 and Tyr15. Inhibition of CDK2-cyclin complexes can also be attributed to association with p27 Kip1 and p21 Waf1/Cip1. Activation of CDK2 complexes requires dephosphorylation of Thr14 and Tyr15 by cdc25 phosphatase and phosphorylation of Thr160, which is mediated by CAK, a complex of CDK7 and cyclin H. CDK2/cyclin E kinase activity is important for the G1 to S transition and phosphorylation of the Rb protein. During S-phase, active CDK2/cyclin A complexes predominate and phosphorylate E2F and the active CDK2 complex persists in the nucleus throughout G2.

Product:

Liquid in 50mM Tris-Glycine (pH 7.4), 0.15M NaCl, 50% Glycerol, 0.01% Sodium azide and 0.05% BSA.

Molecular Weight:

~ 35 kDa

Swiss-Prot:

P24941

Purification&Purity:

The antibody was purified by immunogen affinity chromatography.

Applications:

WB (1/500 - 1/1000), IHC (1/50 - 1/100), IF/ICC (1/50 - 1/100), IP (1/10 - 1/50)

Storage&Stability:

Store at $4 \,^{\circ}{\rm C}$ short term. Aliquot and store at $-20 \,^{\circ}{\rm C}$ long term. Avoid freeze-thaw cycles.

Specificity:

Recognizes endogenous levels of CDK2 protein.

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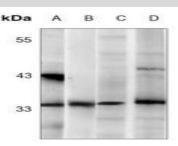
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 1660 South Highway 100, Suite 500 St. Louis Park, MN 55416,USA.

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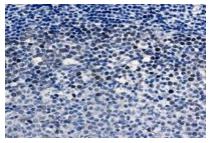
 Tel:
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 Fax:
 6122933841

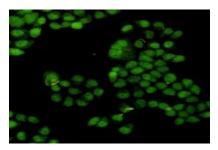
DATA:



Western blot analysis of CDK2 expression in Jurkat (A), C6 (B), CHOK1 (C), Hela (D) whole cell lysates.



Immunohistochemical analysis of CDK2 staining in human tonsil formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.108). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of CDK2 staining in HeLa cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells

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PRODUCT DATA SHEET

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were washed with PBST and incubated with a AF488-conjugated sec-

ondary antibody (green) in PBS at room temperature in the dark.

Note:

For research use only, not for use in diagnostic procedure.

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