

## CDCA2 polyclonal antibody

Catalog: BS61610

Host: Rabbit

Reactivity: Human, Mouse, Rat

### BackGround:

Cell division cycle associated 2 (CDCA2, Repo-Man) is a cell-cycle protein that recruits protein phosphatase 1 (PP1) to mitotic chromatin at anaphase onset, which is essential for cell proliferation. Carboxy-terminal phosphorylation of CDCA2 at Ser893 by Aurora B inhibits the protein and leads to diffuse localization during prometaphase and metaphase. Dephosphorylation of CDCA2 by PP2A is necessary for CDCA2/PP1 complex reformation. The CDCA2/PP1 complex is required for chromatin binding and dephosphorylation of histone H3 at Thr3, Ser10, and Ser28. The CDCA2/PP1 complex is also involved in nuclear envelope reformation during mitotic exit for proper progression through the M/G1 transition. The interaction of CDCA2 with importin beta and Nup153, which is required for nuclear envelope formation, is negatively regulated by CDK phosphorylation of the amino-terminal domain of CDCA2. CDCA2 may play a role in DNA repair as the release of CDCA2 from chromatin at sites of DNA damage promotes the activation of DNA damage response. These results imply that the CDCA2/PP1 complex may play a part in cancer progression. Research studies indicate that CDCA2 may serve as a prognostic marker, as increased CDCA2 expression is seen in a number of cancers, including melanoma, neuroblastoma tumors, squamous cell carcinoma, and synovial sarcomas.

### Product:

1 mg/ml in Phosphate buffered saline (PBS) with 0.05% sodium azide, approx. pH 7.3.

### Molecular Weight:

~ 140 kDa

### Swiss-Prot:

Q69YH5

### Purification&Purity:

The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen and the purity is > 96% (by SDS-PAGE).

### Applications:

WB: 1:500~1:1000

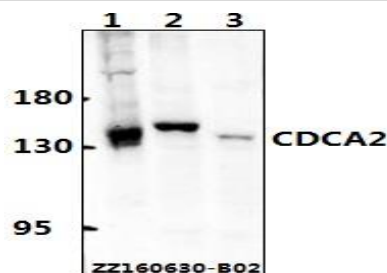
### Storage&Stability:

Store at 4 °C short term. Aliquot and store at -20 °C long term. Avoid freeze-thaw cycles.

### Specificity:

CDCA2 polyclonal antibody detects endogenous levels of CDCA2 protein.

### DATA:



Western blot (WB) analysis of CDCA2 polyclonal antibody at 1:500 dilution

Lane1:HepG2 whole cell lysate(40ug)

Lane2:The brain tissue lysate of Mouse(40ug)

Lane3:The brain tissue lysate of Rat(40ug)

### Note:

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

### Bioworld Technology, Inc.

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

Email: [info@bioworld.com](mailto:info@bioworld.com)

Tel: 6123263284

Fax: 6122933841

### Bioworld technology, co. Ltd.

Add: No 9, weidi road Qixia District Nanjing, 210046, P. R. China.

Email: [info@biogot.com](mailto:info@biogot.com)

Tel: 0086-025-68037686

Fax: 0086-025-68035151