

## PRODUCT DATA SHEET

Bioworld Technology,Inc.

# **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:**

Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2

# **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

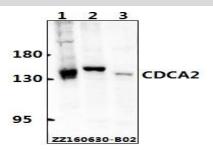
## **Storage&Stability:**

Store at  $4\,\mathrm{C}$  short term. Aliquot and store at -20  $\mathrm{C}$  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.

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