

# Anti-CDC2 (paired 15) (CDK1)

CATALOG No: 55025

#### **BACKGROUND:**

CDC2 protein belongs to the cyclin-dependent kinases (CDKs) family (1,3). CDC2 activity is critical for orderly progression of G2/M phase during cell division (2,3,4). It forms CDC2-cyclin B1 complex and becomes active upon phosphorylation on threonine 161 and dephosphorylation at threonine 14 and tyrosine 15 residues (3,4). Cell progresses through M phase only when all of the above took place. In addition, CDC2 is involved in chromosome condensation, disassembly of the nuclear lamina, and formation of the mitotic spindle (2). Recent findings indicate that functional CDC2-cyclin B complex positively regulates repair mechanism of DNA double-strand breaks (5). Thus, CDC2 helps to overcome negative effects of ionizing radiation.

# SOURCE

Rabbit anti-CDC2 (paired 15) polyclonal antibody was raised against a synthetic peptide corresponding to the sequence of human CDC2 around 15 (EGTYGV). This sequence is also found in mouse, chicken, zebrafish and bovine.

# **REACTIVITY**

This epitope-affinity purified rabbit polyclonal antibody reacts specifically with CDC2. The antibody was evaluated by western blot and ELISA. By western blot, an immunoreactive band around 34 kDa was detected from Hela whole cell lysate.

#### **APPLICATION:**

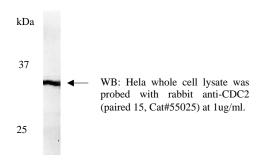
The following concentration ranges are recommended starting points for this product.

 ELISA:
 0.1-1.0 μg/ml

 Western Blot:
 0.5-2.0 μg/ml

 IP\*:
 3.0-5.0 μg/ml

\*: Recommended but not tested.



This product is for research use only.

### STORAGE:

The antibody is supplied as immunoaffinity purified IgG, in 1X PBS containing 0.02% sodium azide. Store at 2-8  $^{\circ}$ C for up to 1 year from the date of shipment. Avoid repeated freeze thaw cycles.

#### **REFERENCE:**

- 1. Weingartner M et al. (2001) The Plant Cell 13: 1929-1943
- 2. Kano F et al. (2000) The J. of Cell Biol. 149: 357-368
- 3. Thomas C et al. (1998) Am.J.Respir. Cell Mol Biol. 19:129-142
- 4. Park M et al. (1998) Cancer Research 60: 542-545
- 5. Caspari T et al. (2002) Genes and Develp. v16:1195-1208

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