

AP01169PU-N**Polyclonal Antibody to Cyclin B1 - Aff - Purified****Alternate names:**

CCNB, CCNB1, Cyclin-B1, G2/mitotic-specific cyclin-B1

Quantity:

0.1 mg

Concentration:

1.0 mg/ml

Background:

In eukaryotic cells, mitosis is initiated following the activation of a protein kinase known variously as maturation-promoting factor, M-phase specific histone kinase or M-phase kinase.

This protein kinase is composed of a catalytic subunit (Cdc2), a regulatory subunit (cyclin B) and a low molecular weight subunit (p13-Suc 1). The Cdc/cyclin enzyme is subject to multiple levels of control of which the regulation of the catalytic subunit by tyrosine phosphorylation is the best understood. Tyrosine phosphorylation inhibits the Cdc2/cyclin B enzyme and tyrosine dephosphorylation, occurring at the onset of mitosis, directly activates the pre-MPF complex.

Evidence has established that B-type cyclins not only act on M-phase regulatory subunits of the Cdc2 protein kinase, but also activate the Cdc25A and Cdc25B endogenous tyrosine phosphatase, of which Cdc2 is the physiological substrate. The specificity of this effect is shown by the inability of either cyclin A or cyclin D1 to display any such stimulation of Cdc25A or Cdc25B.

Uniprot ID:[P14635](#)**NCBI:**[NP_114172.1](#)**GenID:**[891](#)**Host:**

Rabbit

Immunogen:

Synthetic peptide, corresponding to amino acids 110-160 of Human Cyclin B1.

Format:**State:** Liquid purified Ig fraction (> 95% pure by SDS-PAGE).**Purification:** Affinity Chromatography using epitope-specific immunogen.**Buffer System:** Phosphate buffered saline (PBS), pH~7.2**Preservatives:** 0.05% Sodium Azide**Applications:****Western Blot:** 1/500 - 1/1000.

Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Molecular Weight:

~ 60 kDa

Specificity:

This antibody detects endogenous levels of Cyclin B1 protein. (region surrounding GlN144)

Species Reactivity:**Tested:** Human.**Expected from sequence similarity:** Mouse and Rat.

Storage: Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.
Avoid repeated freezing and thawing.
Shelf life: One year from despatch

Pictures: **Western blot (WB)** analysis of Cyclin B1 antibody (Cat.-No. AP01169PU-N) in extracts from Jurkat treated with UV 15'.

