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Schillerstr. 5

## AP06381PU-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 SUC1). 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 estalished 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: <u>P14635</u>
NCBI: <u>NP 114172.1</u>

GeneID: 891
Host: Rabbit

Immunogen: Synthetic peptide, corresponding to amino acids 90-140 of Human Cyclin B1.

**Format:** State: Liquid purified lg fraction

Purification: Affinity-chromatography using epitope-specific immunogen and the

purity is > 95% (by SDS-PAGE)

Buffer System: Phosphate buffered saline (PBS), pH 7.2.

Preservatives: 0.05% sodium azide

Applications: Western blot: 1/500-1/1000.

Immunohistochemistry on paraffin sections: 1/50-1/200.

Immunofluorescence: 1/50-1/200.

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 Ile120)

Species Reactivity: Tested: Human.

**Expected from sequence similarity:** Mouse and Rat.



## AP06381PU-N: Polyclonal Antibody to Cyclin B1 - Aff - Purified

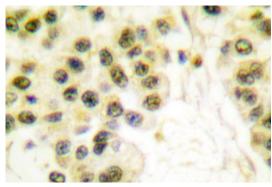
Storage:

Store 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:** 

Immunohistochemistry (IHC) analyzes of Cyclin B1 antibody (Cat.-No.: AP06381PU-N) in paraffin-embedded human breast carcinoma tissue.



**Western blot** (WB) analysis of Cyclin B1 antibody (Cat.-No.: AP06381PU-N) in extracts from HeLa cells treated with serum 10% 15' HepG2.

-117 -85 CYCLIN B1--49 -34 -25