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Schillerstr. 5

## **DP137-05** Polyclonal Antibody to Cyclin B1 - Purified

Alternate names: CCNB, CCNB1, Cyclin-B1, G2/mitotic-specific cyclin-B1

Quantity: 0.5 ml

Background: In mammals, cyclin B associates with inactive p34cdc2, which facilitates

phosphorylation of p34cdc2 at aa 14Thr and 15Tyr. This maintains the inactive state until the end of G2-phase. The inactive cyclin B-p34cdc2 complex continues to accumulate in the cytoplasm until the completion of DNA synthesis, when Cdc25, a specific protein phosphatase, dephosphorylates aa 14Thr and 15Tyr of p34cdc2 rendering the complex active at the G2/M boundary. This mitotic kinase complex remains active until the metaphase/anaphase transition when cyclin B is degraded. This degradation process is Ubiquitin-dependent and is necessary for the cell to exit

mitosis. So, cyclin B-p34cdc2 plays a critical role in G2 to M transition.

Uniprot ID: P14635

NCBI: <u>NP 114172.1</u>

GenelD: 891
Host: Rabbit

**Applications:** 

Immunogen:A synthetic peptide derived from C-terminus of human cyclin B1 proteinFormat:State: Liquid purified Ig fraction containing sodium azide as preservative

Immunohistochemistry on formalin-fixed paraffin embedded sections:

dilute 1:50-1:100 in an ABC method (incubation time: 30 minutes at room

temperature).

Formalin fixed paraffin embedded tissue sections require high temperature antigen

unmasking with 10 mM citrate buffer, pH 6.0 prior to immunostaining.

Recommended positive control: Breast carcinoma.

Other applications not tested. Optimal dilutions are dependent on conditions and

should be determined by the user.

Specificity: Reacts to Cyclin B1.

Cellular localization: cytoplasmic. **Species:** Human, Mouse, Rat. Other species not tested.

Storage: Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for

onger.

Avoid repeated freezing and thawing. Shelf life: one year from despatch.



**Pictures:** 

Formalin fixed paraffin embedded human breast carcinoma stained with Cyclin B1 antibody. DP137

