

**Cyclin B1 (G2- & M-phase Cyclin) Antibody - With BSA and Azide**  
**Mouse Monoclonal Antibody [Clone SPM619 ]**  
**Catalog # AH12577**

## Specification

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### Cyclin B1 (G2- & M-phase Cyclin) Antibody - With BSA and Azide - Product Information

Application	,2,3,4,
Primary Accession	<a href="#">P14635</a>
Other Accession	<a href="#">891</a> , <a href="#">23960</a>
Reactivity	Human, Mouse
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG1, kappa
Calculated MW	55-62kDa KDa

### Cyclin B1 (G2- & M-phase Cyclin) Antibody - With BSA and Azide - Additional Information

**Gene ID** 891

#### Other Names

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

#### Storage

Store at 2 to 8°C. Antibody is stable for 24 months.

#### Precautions

Cyclin B1 (G2- & M-phase Cyclin) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

### Cyclin B1 (G2- & M-phase Cyclin) Antibody - With BSA and Azide - Protein Information

**Name** CCNB1

**Synonyms** CCNB

#### Function

Essential for the control of the cell cycle at the G2/M (mitosis) transition.

#### Cellular Location

Cytoplasm. Nucleus. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome

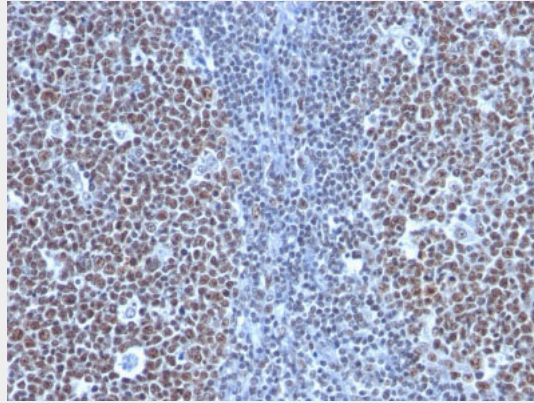
### Cyclin B1 (G2- & M-phase Cyclin) Antibody - With BSA and Azide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)

- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### **Cyclin B1 (G2- & M-phase Cyclin) Antibody - With BSA and Azide - Images**



Formalin-fixed, paraffin-embedded human Tonsil stained with Cyclin B1 Monoclonal Antibody (SPM619)

### **Cyclin B1 (G2- & M-phase Cyclin) Antibody - With BSA and Azide - Background**

It recognizes a protein of 55-62kDa, identified as cyclin B1. 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.

### **Cyclin B1 (G2- & M-phase Cyclin) Antibody - With BSA and Azide - References**

Galaktionov, K. and Beach D. 1991. Specific activation of Cdc25 tyrosine phosphatases by B type cyclins: Evidence for multiple roles of mitotic cyclins. *Cell* 67: 1181-1194. |