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

Mouse Monoclonal Antibody [Clone SPM619]
Catalog # AH12577

Specification

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

Application	**IHC, IF, FC**
Primary Accession	P14635
Other Accession	891, 23960
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

Application Note
IHC~~1:100~500<br \>IF~~1:50~200<br \>FC~~1:10~50

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

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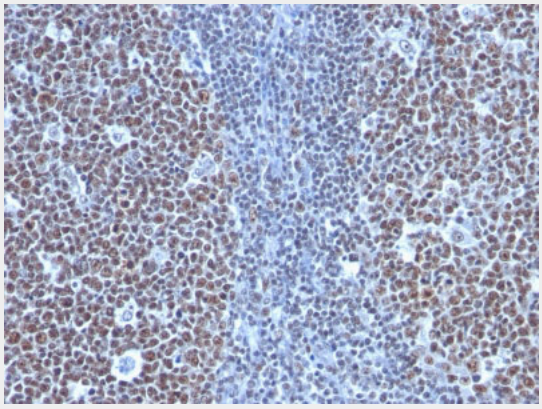
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- 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. |