

Cyclin B1 (G2- & M-phase Cyclin) Antibody - With BSA and Azide
Mouse Monoclonal Antibody [Clone CCNB1/1098]
Catalog # AH12574

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
IF~~1:50~200
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

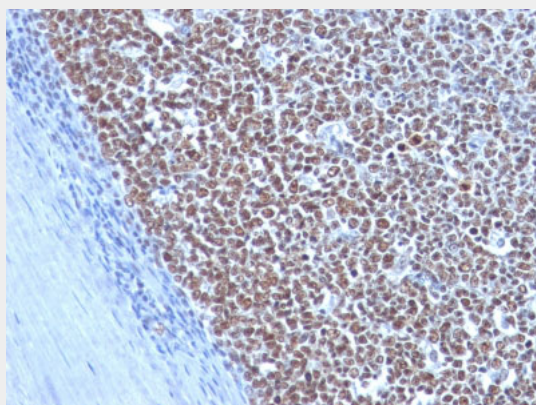
Cytoplasm. Nucleus. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome

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

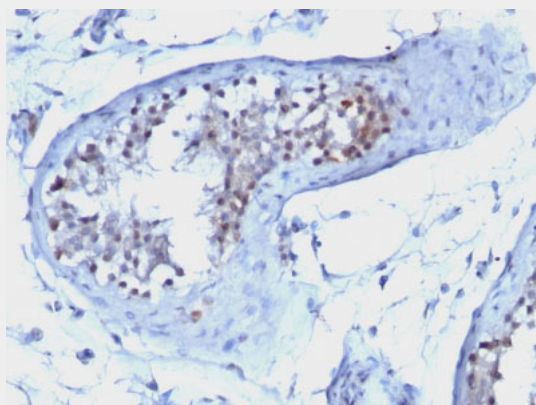
Provided below are standard protocols that you may find useful for product applications.

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

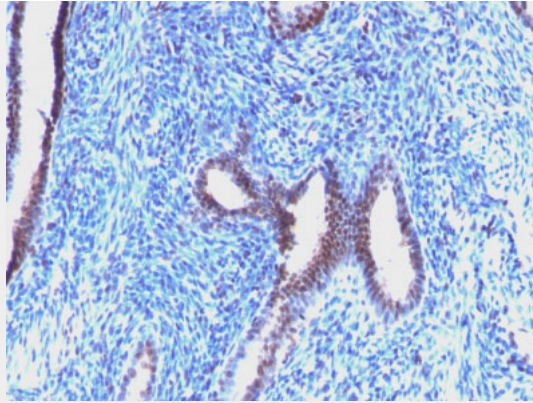
Cyclin B1 (G2- & M-phase Cyclin) Antibody - With BSA and Azide - Images



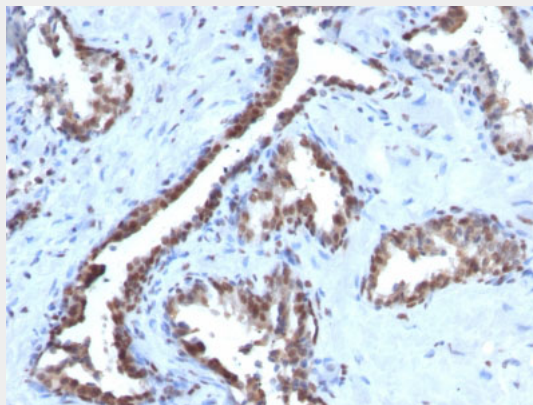
Formalin-fixed, paraffin-embedded human Tonsil stained with Cyclin B1 Monoclonal Antibody (CCNB1/1098)



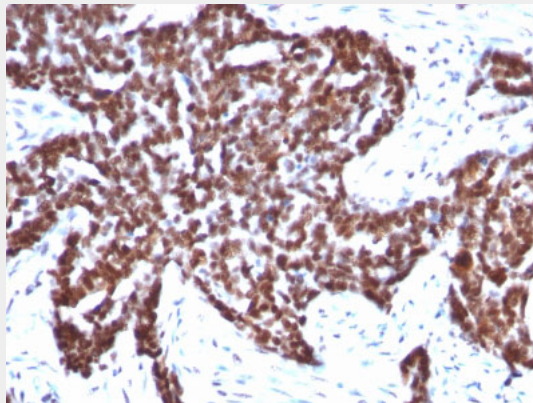
Formalin-fixed, paraffin-embedded human Testicular Carcinoma stained with Cyclin B1 Monoclonal Antibody (CCNB1/1098)



Formalin-fixed, paraffin-embedded human Endometrial Carcinoma stained with Cyclin B1 Monoclonal Antibody (CCNB1/1098)



Formalin-fixed, paraffin-embedded human Prostate Carcinoma stained with Cyclin B1 Monoclonal Antibody (CCNB1/1098)



Formalin-fixed, paraffin-embedded human Ovarian Carcinoma stained with Cyclin B1 Monoclonal Antibody (CCNB1/1098)

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