

## Cyclin B1 (G2- & M-phase Cyclin) Antibody

Mouse Monoclonal Antibody [Clone V92.1]

Catalog No	Format	Size
891-MSM1-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
891-MSM1-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
891-MSM1-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

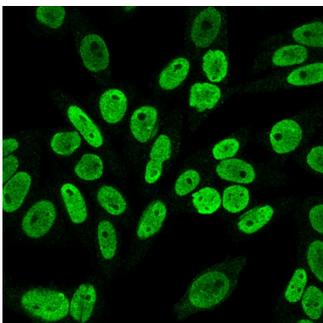
Applications	Tested Dillution	Note
Flow Cytometry (Flow)	1-2ug/million cells	
Immunofluorescence (IF)	1-3ug/ml	

### Product Details

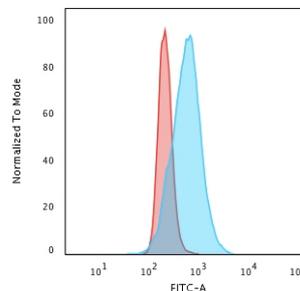
<b>Clone</b>	V92.1
<b>Gene Name</b>	CCNB1
<b>Immunogen</b>	Hamster Cyclin B1 protein
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Isotype / Light Chain</b>	IgG1 / Kappa
<b>Mol. Weight of Antigen</b>	55-62kDa
<b>Cellular Localization</b>	Centrosome, Cytoplasm, Cytoskeleton, Microtubule organizing center, Nucleus
<b>Species Reactivity</b>	Hamster, Human, Mouse
<b>Positive Control</b>	Cell line in logarithmic growth phase. Tonsil or testicular, Endometrial, Prostate or Ovarian Carcinoma.

\*Optimal dilution for a specific application should be determined.

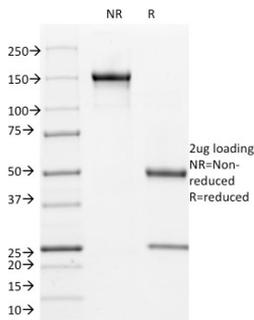
### Product Images for Cyclin B1 (G2- & M-phase Cyclin) Antibody



Immunofluorescence Analysis of PFA fixed HeLa cells labeling Cyclin B1 Mouse Monoclonal Antibody (V92.1) followed by Goat anti-mouse IgG-CF488 (Green).



Flow Cytometric Analysis of paraformaldehyde-fixed HeLa cells using Cyclin B1 Mouse Monoclonal Antibody (V92.1) followed by goat anti-mouse IgG-CF488 (Blue); Isotype Control (Red).



SDS-PAGE Analysis of Purified Cyclin B1 Mouse Monoclonal Antibody (V92.1).  
Confirmation of Integrity and Purity of Antibody.

### Specificity & Comments

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.

### Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

### Supplied As

200ug/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

### Storage and Stability

Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

### Research Areas

Hypoxia, Transcription Factors