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

Mouse Monoclonal Antibody [Clone SPM619]

Catalog No	Format	Size
891-MSM2X-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
891-MSM2X-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
891-MSM2X-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

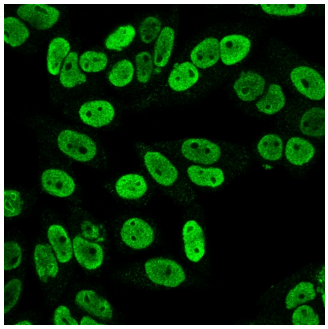
Applications	Tested Dillution	Note
Flow Cytometry (Flow)	1-2ug/million cells	
Immunofluorescence (IF)	1-3ug/ml	
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes

Product Details

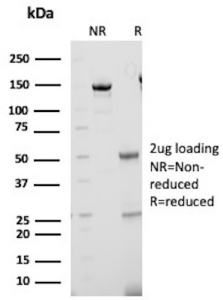
Clone	SPM619
Gene Name	CCNB1
Immunogen	Recombinant human full-length CCNB1 protein
Host	Mouse
Clonality	Monoclonal
Isotype / Light Chain	IgG1 / Kappa
Mol. Weight of Antigen	55-62kDa
Cellular Localization	Centrosome, Cytoplasm, Cytoskeleton, Microtubule organizing center, Nucleus
Species Reactivity	Human, Mouse
Positive Control	Cell line in logarithmic growth phase. Tonsil or testicular, Endometrial, Prostate or Ovarian Carcinoma.

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

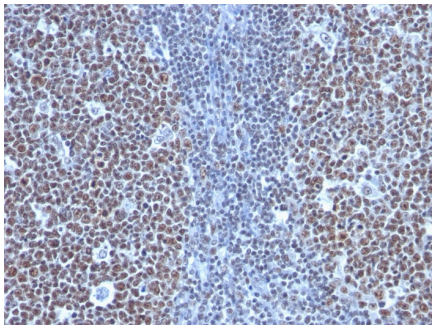
Product Images for Cyclin B1 (G2- & M-phase Cyclin) Antibody



Immunofluorescence Analysis of PFA fixed HeLa cells labeling Cyclin B1 MAb (SPM619)followed by Goat anti-mouse IgG-CF488 (Green).



SDS-PAGE Analysis of Purified G2/mitotic-specific cyclin-B1 MouseMonoclonal Antibody (SPM619). Confirmation of Purity and Integrity of Antibody.



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

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.

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

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.