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## 36-1835: Monoclonal Antibody to Cyclin B1 (G2- & M-phase Cyclin)(Clone: SPM619)

Clonality: Monoclonal
Clone Name: SPM619
Application: FACS,IF,IHC
Reactivity: Human, Mouse

Gene : CCNB1
Gene ID : 891
Uniprot ID : P14635
Format : Purified
Alternative Name : CCNB1,CCNB
Isotype : Mouse IgG1, kappa

Immunogen Information: Recombinant human full-length CCNB1 protein

## **Description**

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.

## **Product Info**

**Amount :** 100 μg

**Purification:** Affinity Chromatography

**Content:** 100 μg in 500 μl PBS containing 0.05% BSA and 0.05% sodium azide. Sodium azide is highly

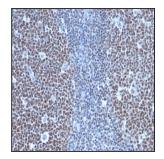
toxic.

**Storage condition :** Store the antibody at 4°C; stable for 6 months. For long-term storage; store at -20°C. Avoid

repeated freeze and thaw cycles.

## **Application Note**

Flow Cytometry (1-2ug/million cells); Immunofluorescence (1-2ug/ml); Immunohistochemistry (Formalin-fixed) (1-2ug/ml for 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&degC followed by cooling at RT for 20 minutes);



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