## 36-3443: Anti-Cyclin B1 (G2- \& M-phase Cyclin) Monoclonal Antibody(Clone: V92.1)

| Clonality : | Monoclonal |
| :--- | :--- |
| Clone Name: | V92.1 |
| Application : | FACS,IF,IP |
| Reactivity : | Human, Mouse |
| Gene: | CCNB1 |
| Gene ID : | 891 |
| Uniprot ID : | P14635 |
| Alternative Name : | CCNB, CCNB1, CCNB1_HUMAN, G2 Mitotic Specific Cyclin B1 |
| Isotype : | Mouse IgG1, kappa |

Immunogen Information : Hamster Cyclin B1 protein

## Description

It recognizes a protein of $55-62 \mathrm{kDa}$, 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 14 Thr and 15 Tyr of p 34 cdc 2 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 : | $20 \mu \mathrm{~g} / 100 \mu \mathrm{~g}$ |
| :--- | :--- |
| Content : | $200 \mu \mathrm{~g} / \mathrm{ml}$ of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10 mM PBS |
|  | with $0.05 \%$ BSA \& $0.05 \%$ azide. Also available WITHOUT BSA \& azide at $1.0 \mathrm{mg} / \mathrm{ml}$. |

## Application Note

Flow Cytometry (1-2ug/million cells); Immunofluorescence (1-2ug/ml); Immunoprecipitation (1-2ug/500ug protein) (precipitates active CDK1/cyclin B1 complexes);


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

