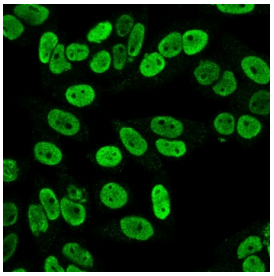
# CCNB1 Antibody / Cyclin B1 [clone SPM619] (V2947)

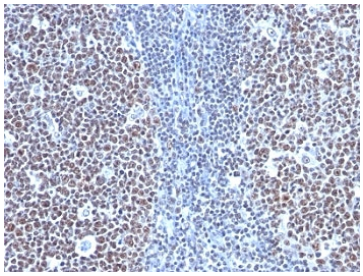
| Catalog No. | Formulation | Size |
|---|---|---|
| V2947-100UG | 0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide | 100 ug |
| V2947-20UG | 0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide | 20 ug |
| V2947SAF-100UG | 1 mg/ml in 1X PBS; BSA free, sodium azide free | 100 ug |
| V2947IHC-7ML | Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only* | 7 ml |

**Bulk quote request**

| | |
|---|---|
| **Availability** | 1-3 business days |
| **Species Reactivity** | Human |
| **Format** | Purified |
| **Host** | Mouse |
| **Clonality** | Monoclonal (mouse origin) |
| **Isotype** | Mouse IgG1, kappa |
| **Clone Name** | SPM619 |
| **Purity** | Protein G affinity chromatography |
| **UniProt** | P14635 |
| **Localization** | Cytoplasmic & nuclear |
| **Applications** | Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT<br>Immunofluorescence: 1-2ug/ml |
| **Limitations** | This CCNB1 antibody is available for research use only. |



Immunofluorescent staining of PFA-fixed human HeLa cells with CCNB1 antibody (clone SPM619).



IHC: Formalin-fixed, paraffin-embedded human tonsil stained with CCNB1 antibody (clone SPM619).

## 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.

## Application Notes

Optimal dilution of the CCNB1 antibody should be determined by the researcher.

1. Staining of formalin-fixed tissues requires boiling tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min followed by cooling at RT for 20 min.
2. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

## Immunogen

Recombinant human full-length protein was used as the immunogen for the CCNB1 antibody.

## Storage

Store the CCNB1 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Ordering: Phone: 858.663.9055 | Fax: 1.267.821.0800 | Email: info@nsjbio.com
Copyright © NSJ Bioreagents. All rights reserved.