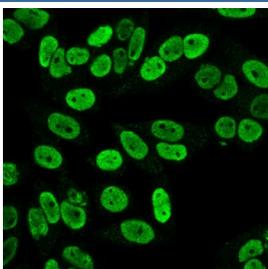


## CCNB1 Antibody / Cyclin B1 [clone SPM619] (V2947)

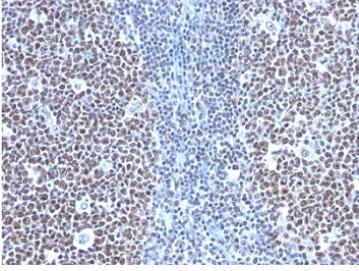
Catalog No.	Formulation	Size
V2947-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2947-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2947SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V2947IHC-7ML	Prediluted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

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