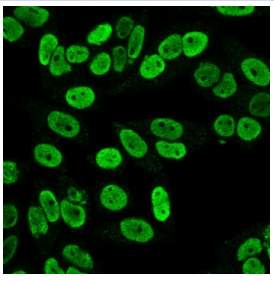
CCNB1 Antibody / Cyclin B1 [clone SPM619] (V2947)

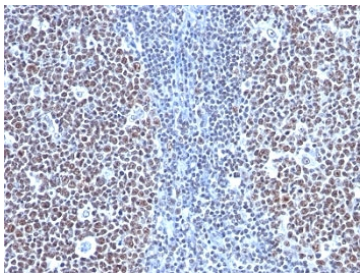
Catalog No.	Formulation	Size
V2947-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2947-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2947SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V2947IHC-7ML	Prediluted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