

Datasheet for ABIN3025089 **anti-Cyclin B1 antibody**

4 Images



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Overview

Quantity:	100 µg
Target:	Cyclin B1 (CCNB1)
Reactivity:	Human, Mouse
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This Cyclin B1 antibody is un-conjugated
Application:	Immunofluorescence (IF), Flow Cytometry (FACS), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

Product Details

Immunogen:	Recombinant human full-length protein was used as the immunogen for the Cyclin B1 antibody.
Clone:	CCNB1-1098
Isotype:	IgG1 kappa
Characteristics:	<p>It recognizes a protein of 55-62 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 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.</p>

Product Details

Purification: Protein G affinity chromatography

Target Details

Target: Cyclin B1 (CCNB1)

Alternative Name: Cyclin B1 ([CCNB1 Products](#))

Background: It recognizes a protein of 55-62 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 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.

Pathways: [Cell Division Cycle](#), [AMPK Signaling](#), [Mitotic G1-G1/S Phases](#), [M Phase](#)

Application Details

Application Notes: Optimal dilution of the Cyclin B1 antibody should be determined by the researcher.

1. Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM Citrate buffer, pH 6.0, 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. \. Flow Cytometry: 0.5-1 µg/million cells in 0.1ml, Immunofluorescence: 1-2 µg/mL, Immunohistochemistry (FFPE): 0.5-1 µg/mL for 30 min at RT (1), Prediluted format: incubate for 30 min at RT (2)

Restrictions: For Research Use only

Handling

Concentration: 1 mg/mL

Buffer: 1 mg/mL in 1X PBS, BSA free, sodium azide free

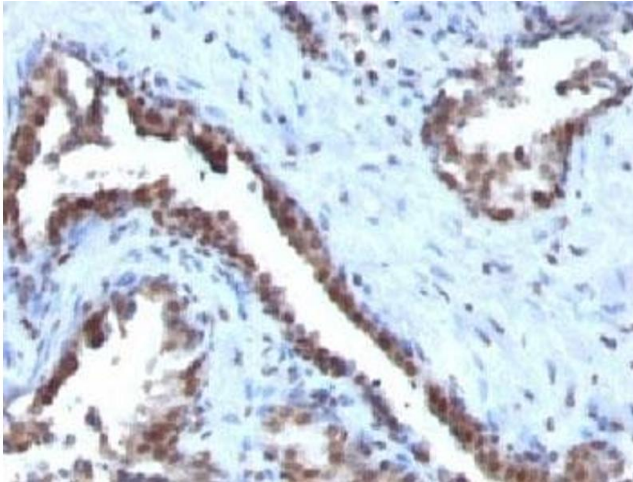
Preservative: Azide free

Storage: 4 °C, -20 °C

Handling

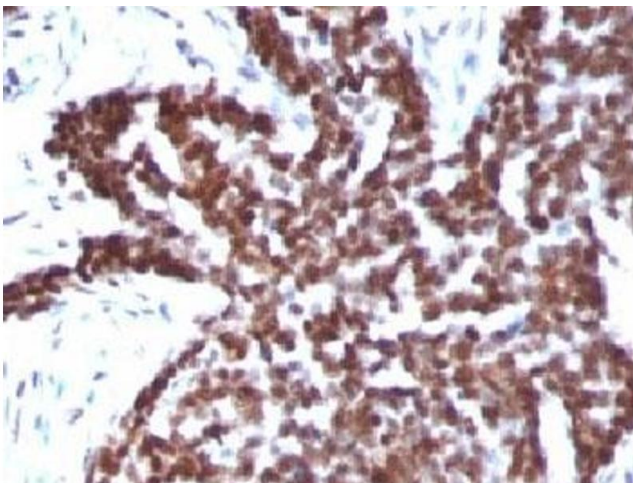
Storage Comment: Store the Cyclin B1 antibody at 2-8°C (with azide) or aliquot and store at -20°C or colder (without azide).

Images



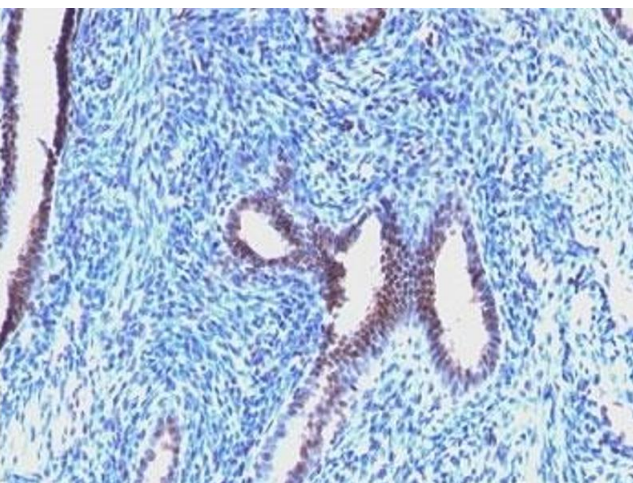
Immunohistochemistry (Formalin-fixed Paraffin-embedded Sections)

Image 1. Formalin-fixed, paraffin-embedded human prostate carcinoma stained with Cyclin B1 antibody.



Immunohistochemistry (Formalin-fixed Paraffin-embedded Sections)

Image 2. Formalin-fixed, paraffin-embedded human ovarian carcinoma stained with Cyclin B1 antibody.



Immunohistochemistry (Formalin-fixed Paraffin-embedded Sections)

Image 3. Formalin-fixed, paraffin-embedded human endometrial carcinoma stained with Cyclin B1 antibody (CCNB1/1098).

Please check the [product details page](#) for more images. Overall 4 images are available for ABIN3025089.