

Basic Information

Product Name	Anti-Cyclin B1/CCNB1 Antibody	
Gene Name	CCNB1	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human	
Tested Application	WB, ICC/IF, FCM	
Contents	500 ug/ml antibody with PBS, 0.02% NaN3, 1 mg/ml BSA and 50% glycerol.	
Immunogen	E.coli-derived human Cyclin B1 recombinant protein (Position: M1-V433). Human Cyclin B1 shares 86% and 85% amino acid (aa) sequences identity with mouse and rat Cyclin B1, respectively.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	55 kDa	
Dilution Ratios	Western blot (WB):	1:500-2000
	Immunocytochemistry/Immunofluorescence (ICC/IF):	1:50-400
	Flow Cytometry (Fixed):	1:50-200
	(Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

Storage

12 months from date of receipt, -20°C as supplied.

Background Information

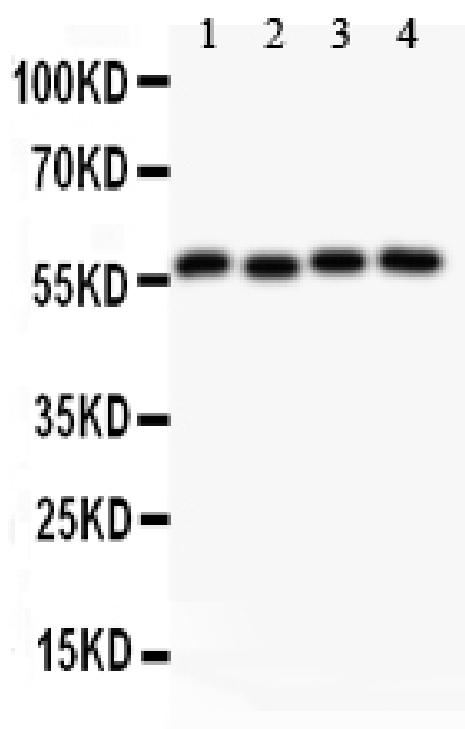
CCNB also known as Cyclin B1, is a protein that in humans is encoded by the CCNB1 gene, and it is mapped to 5q13.2. The protein encoded by this gene is a regulatory protein involved in mitosis. The gene product complexes with p34(cdc2) to form the maturation-promoting factor (MPF). Two alternative transcripts have been found, a constitutively expressed transcript and a cell cycle-regulated transcript, that is expressed predominantly during G2/M phase. The different transcripts result from the use of alternate transcription initiation sites. CCNB contributes to the switch-like all

or none behavior of the cell in deciding to commit to mitosis. Its activation is well-regulated, and positive feedback loops ensure that once the cyclin B1-Cdk1 complex is activated, it is not deactivated.

Reference

Anti-Cyclin B1/CCNB1 Antibody 被引用在10文献中。

Selected Validation Data



Western blot analysis of Cyclin B1/CCNB1 using anti-Cyclin B1/CCNB1 antibody (PB9104). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: Hela whole cell lysates,

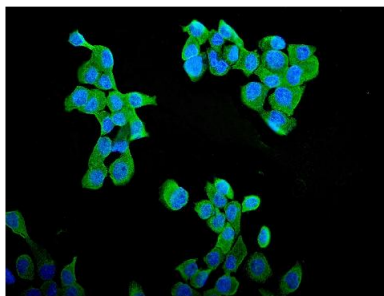
Lane 2: 293T whole cell lysates,

Lane 3: MCF-7 whole cell lysates,

Lane 4: COLO320 whole cell lysates.

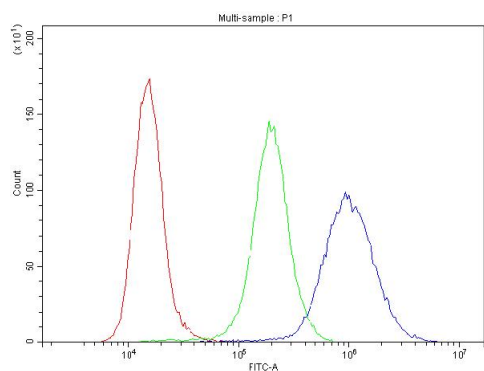
After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-Cyclin B1/CCNB1 antigen affinity purified polyclonal antibody (PB9104) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for Cyclin B1/CCNB1 at approximately 55 kDa. The expected band size for Cyclin B1/CCNB1 is at 48 kDa.



ICC/IF analysis of Cyclin B1/CCNB1 using anti-Cyclin B1/CCNB1 antibody (PB9104).

Cyclin B1/CCNB1 was detected in an immunocytochemical section of A431 cells. The section was incubated with rabbit anti-Cyclin B1/CCNB1 Antibody (PB9104) at a dilution of 1:100. Fluoro488 Conjugated Goat Anti-Rabbit IgG (Green) (Catalog # BA1127) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).



Flow Cytometry analysis of THP-1 cells using anti-Cyclin B1/CCNB1 antibody (PB9104).

Overlay histogram showing THP-1 cells stained with PB9104 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Cyclin B1/CCNB1 Antibody (PB9104) at 1:100 dilution for 30 min at 20°C. Fluoro488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.