## For Research Use Only

# Cyclin B1 Polyclonal antibody

Catalog Number: 55004-1-AP

Featured Product

271 Publications

NM\_031966

GeneID (NCBI):



#### **Basic Information**

Catalog Number: 55004-1-AP Concentration: 500 ug/ml

Source: Rabbit Isotype: IgG UNIPROT ID:
P14635
Full Name:
cyclin B1
Calculated MW:
48 kDa
Observed MW:

55-60 kDa

GenBank Accession Number:

Purification Method: Antigen affinity purification Recommended Dilutions: WB 1:1000-1:4000

IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate IHC 1:200-1:800 IF/ICC 1:200-1:800

## **Applications**

**Tested Applications:** 

WB, IF/ICC, FC (Intra), IP, ELISA

Cited Applications: WB, IF, IP, CoIP Species Specificity: human, mouse Cited Species:

human, mouse, rat, pig, bovine, sheep

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

#### **Positive Controls:**

WB: HeLa cells, HepG2 cells, PC-3 cells, Jurkat cells, K-

562 cells

IP: HeLa cells,

IHC: human skin cancer tissue, IF/ICC: HeLa cells, U2OS cells

# **Background Information**

Cyclin B1 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 of the cell cycle. The different transcripts result from the use of alternate transcription initiation sites. The antibody is specific to CCNB1. We got a 55-60 kDa band in western blotting maybe due to phosphorylation.

### **Notable Publications**

Author	Pubmed ID	Journal	Application
Zijian Zhang	34593753	Cell Death Dis	WB
Xiaoman Chen	30207732	Mol Pharm	WB
Hui-Ting Liu	34667869	Laryngoscope Investig Otolaryngol	WB

### Storage

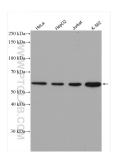
Storage:

Store at -20°C. Stable for one year after shipment.

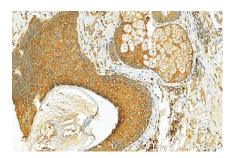
Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol Aliquoting is unnecessary for -20°C storage

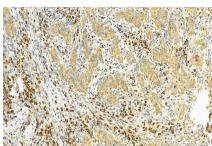
### Selected Validation Data



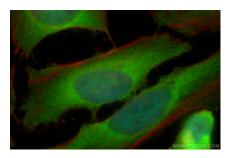
Various lysates were subjected to SDS PAGE followed by western blot with 55004-1-AP (Cyclin B1 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



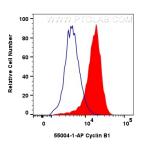
Immunohistochemical analysis of paraffinembedded skin cancer slide using 55004-1-AP (Cyclin B1 antibody) at dilution of 1:400 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



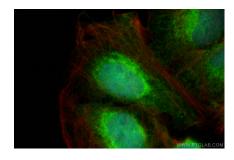
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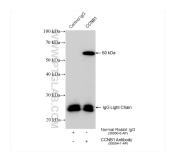
Immunofluorescent analysis of (4% PFA) fixed HeLa cells using Cyclin B1 antibody (55004-1-AP) at dilution of 1:400 and Coralite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-phalloidin (red).



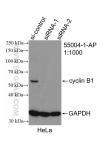
1x10^6 HeLa cells were intracellularly stained with 0.4 ug Cyclin B1 Polyclonal antibody (55004-1-AP) (red), or 0.4 ug Rabbit IgG control Rabbit PolyAb (30000-0-AP) (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).



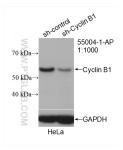
Immunofluorescent analysis of (4% PFA) fixed U2OS cells using Cyclin B1 antibody (55004-1-AP) at dilution of 1:400 and Coralite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-phalloidin (red).



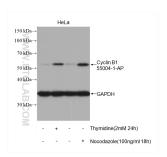
IP result of anti-Cyclin B1 (IP:55004-1-AP, 4ug; Detection:55004-1-AP 1:2000) with HeLa cells lysate 1560 ug.



WB result of Cyclin B1 antibody (55004-1-AP; 1:1000; incubated at room temperature for 1.5 hours) with sh-Control and sh-Cyclin B1 transfected HeLa cells.



WB result of Cyclin B1 antibody (55004-1-AP; 1:1000; incubated at room temperature for 1.5 hours) with sh-Control and sh-Cyclin B1 transfected HeLa cells.



Non-treated HeLa and thymidine or nocodazole treated HeLa cells were subjected to SDS PAGE followed by western blot with 55004-1-AP (Cyclin B1 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with GAPDH antibody as loading control.