

## Cyclin B1 Monoclonal Antibody

<b>Catalog No :</b>	YM0175
<b>Reactivity :</b>	Human;Rat
<b>Applications :</b>	WB;IP;IF;FCM;ELISA
<b>Target :</b>	Cyclin B1
<b>Fields :</b>	>>FoxO signaling pathway;>>Cell cycle;>>Oocyte meiosis;>>p53 signaling pathway;>>Cellular senescence;>>Progesterone-mediated oocyte maturation;>>Human immunodeficiency virus 1 infection
<b>Gene Name :</b>	CCNB1
<b>Protein Name :</b>	G2/mitotic-specific cyclin-B1
<b>Human Gene Id :</b>	891
<b>Human Swiss Prot No :</b>	P14635
<b>Mouse Swiss Prot No :</b>	P24860
<b>Rat Gene Id :</b>	25203
<b>Rat Swiss Prot No :</b>	P30277
<b>Immunogen :</b>	Purified recombinant fragment of human Cyclin B1 expressed in E. Coli.
<b>Specificity :</b>	Cyclin B1 Monoclonal Antibody detects endogenous levels of Cyclin B1 protein.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Monoclonal, Mouse
<b>Dilution :</b>	WB 1:500 - 1:2000. IF 1:200 - 1:1000. Flow cytometry: 1:200 - 1:400. ELISA: 1:10000. Not yet tested in other applications.
<b>Purification :</b>	Affinity purification

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**Storage Stability :** -15°C to -25°C/1 year(Do not lower than -25°C)

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**Molecularweight :** 48kD

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**Cell Pathway :** AMPK

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**P References :**

1. Br J Cancer. 2009 Oct 20;101(8):1461-8.
2. Cancer Res. 2010 Feb 1;70(3):1265-74.
3. J Biol Chem. 2010 Jun 4;285(23):17833-45.

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**Background :** 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. [provided by RefSeq, Jul 2008],

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**Function :** developmental stage:Accumulates steadily during G2 and is abruptly destroyed at mitosis.,function:Essential for the control of the cell cycle at the G2/M (mitosis) transition.,PTM:Ubiquitinated by the SCF(NIPA) complex during interphase, leading to its destruction. Not ubiquitinated during G2/M phases.,similarity:Belongs to the cyclin family.,similarity:Belongs to the cyclin family. Cyclin AB subfamily.,subunit:Interacts with the CDC2 protein kinase to form a serine/threonine kinase holoenzyme complex also known as maturation promoting factor (MPF). The cyclin subunit imparts substrate specificity to the complex. Binds HEI10. Interacts with catalytically active RALBP1 and CDC2 during mitosis to form an endocytotic complex during interphase.,

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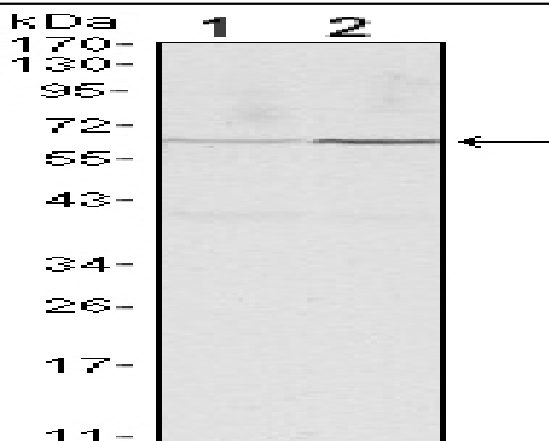
**Subcellular Location :** Cytoplasm. Nucleus. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome.

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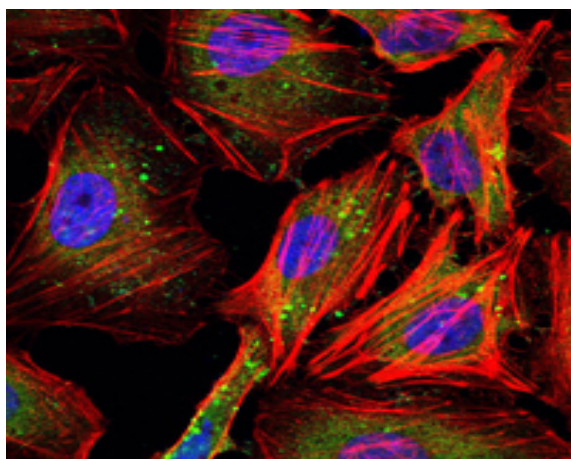
**Expression :** Breast adenocarcinoma,Lung,Placenta,

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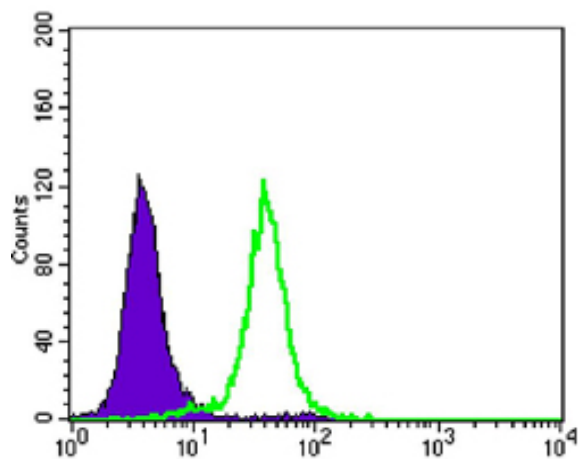
## Products Images



Western Blot analysis using Cyclin B1 Monoclonal Antibody against HeLa (1) and PC-12 (2) cell lysate.



Immunofluorescence analysis of HeLa cells using Cyclin B1 Monoclonal Antibody (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.



Flow cytometric analysis of HeLa cells using Cyclin B1 Monoclonal Antibody (green) and negative control (purple).