



Rabbit Anti-Cyclin B1 antibody

SL0572R

Product Name	Cyclin B1
Chinese Name	周期素 B1 抗体
Alias	CCNB 1; CCNB; CCNB1; CCNB1_HUMAN; G2 mitotic specific cyclin B1; G2/mitotic-specific
Research Area	Tumour Cell biology immunology Cyclin
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Human, Mouse, Rat, (predicted: Cow,) WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,Flow-C
Applications	(Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Theoretical molecular weight	48kDa
Cellular localization	The nucleus cytoplasmic
Form	Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human Cyclin B1: 271-433/433
Lsotype	IgG
Purification	affinity purified by Protein A
Buffer Solution	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.
Storage	Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Attention	This product as supplied is intended for research use only, not for use in human, therapeutic or d applications.
PubMed	PubMed
Product Detail	The protein encoded by this gene is a regulatory protein involved in mitosis. The gene product con p34(cdc2) to form the maturation-promoting factor (MPF). Two alternative transcripts have been

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 [provided by RefSeq, Jul 2008].

Function:

Essential for the control of the cell cycle at the G2/M (mitosis) transition.

Subunit:

Interacts with the CDC2 protein kinase to form a serine/threonine kinase holoenzyme complex and maturation promoting factor (MPF). The cyclin subunit imparts substrate specificity to the complex. HEI10. Interacts with catalytically active RALBP1 and CDC2 during mitosis to form an endocytosis complex during interphase. Interacts with CCNF; interaction is required for nuclear localization.

Subcellular Location:

Cytoplasm. Nucleus. Cytoplasm, cytoskeleton, centrosome.

Post-translational modifications:

Ubiquitinated by the SCF(NIPA) complex during interphase, leading to its destruction. Not ubiquitinated during G2/M phases.

Phosphorylated by PLK1 at Ser-133 on centrosomes during prophase: phosphorylation by PLK1 causes nuclear import. Phosphorylation at Ser-147 was also reported to be mediated by PLK1 but seems to be the primary phosphorylation site.

Similarity:

Belongs to the cyclin family. Cyclin AB subfamily.

SWISS:

P14635

Gene ID:

891

Database links:

[Entrez Gene: 891](#) Human

[Entrez Gene: 268697](#) Mouse

[Entrez Gene: 25203](#) Rat

[Omim: 123836](#) Human

[SwissProt: P14635](#) Human

[SwissProt: P24860](#) Mouse

[SwissProt: P30277](#) Rat

[Unigene: 23960](#) Human

[Unigene: 260114](#) Mouse

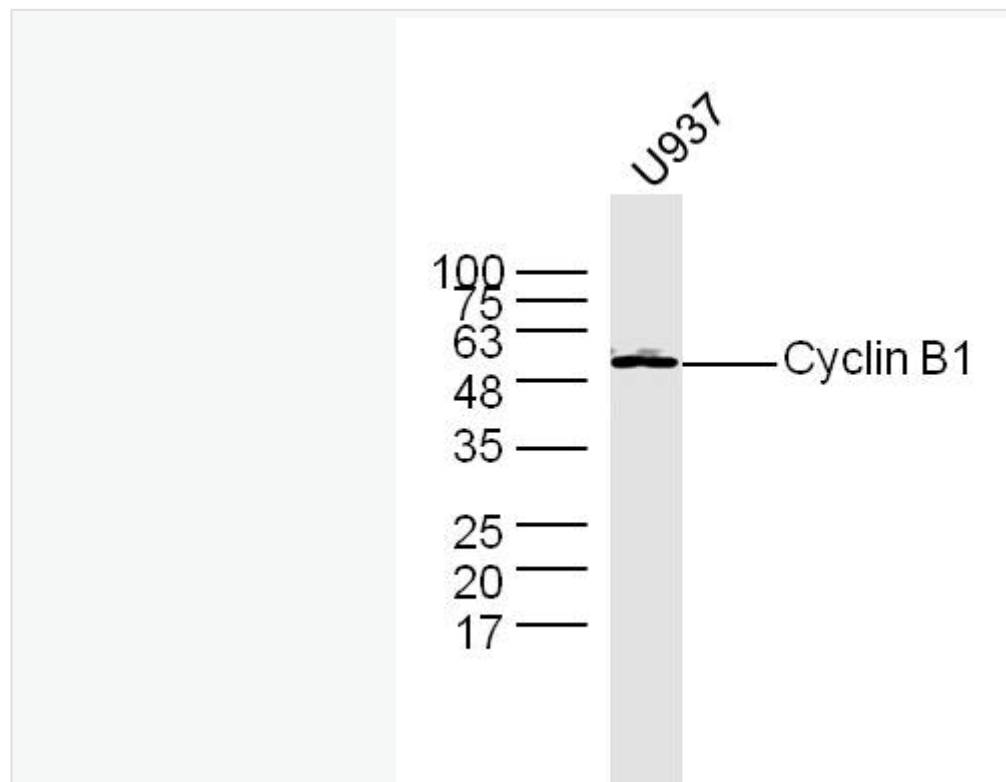
[Unigene: 380027](#) Mouse

[Unigene: 482545](#) Mouse

[Unigene: 9232](#) Rat

主要出现在 G2 期。Cyclin B 是细胞周期调节必不可少的条件。细胞周期素 B1 是细胞周期其它异常表达将导致细胞周期发生紊乱，致使 Tumour 形成。

Product
Picture



Sample:

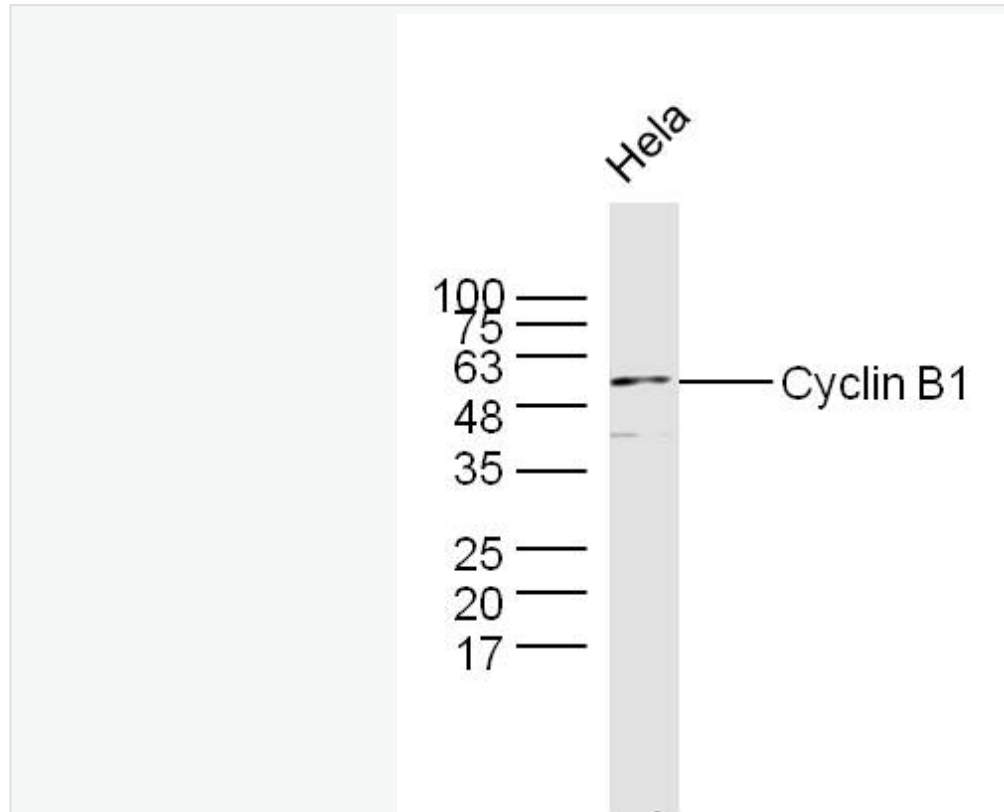
U937 Cell (Human) Lysate at 30 ug

Primary: Anti- Cyclin B1 (SL0572R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 48 kD

Observed band size: 50 kD



Sample:

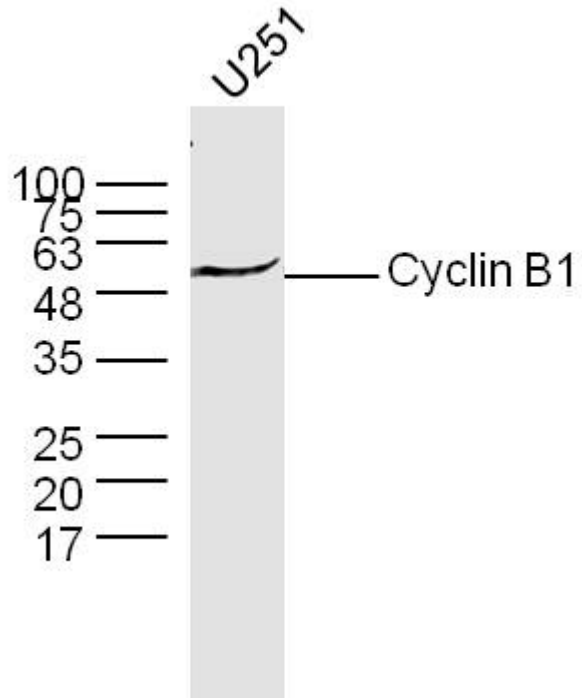
HeLa Cell (Human) Lysate at 30 ug

Primary: Anti- Cyclin B1 (SL0572R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 48 kD

Observed band size: 50 kD



Sample:

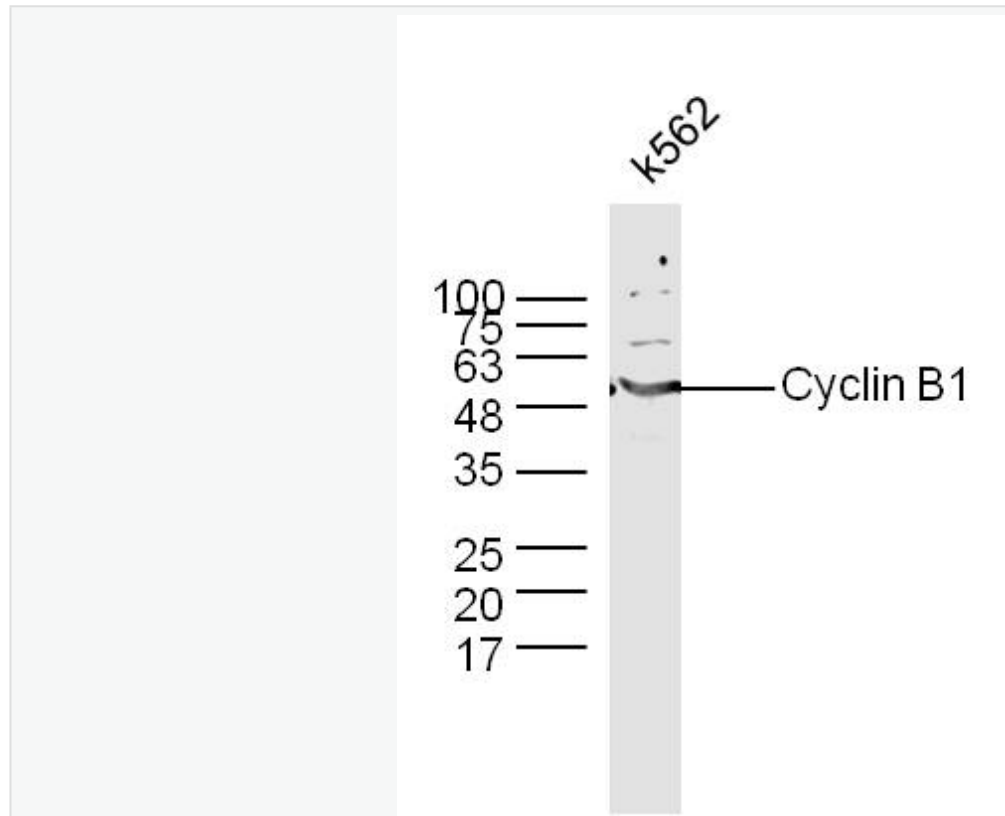
U251 Cell (Human) Lysate at 30 ug

Primary: Anti- Cyclin B1 (SL0572R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 48 kD

Observed band size: 50 kD



Sample:

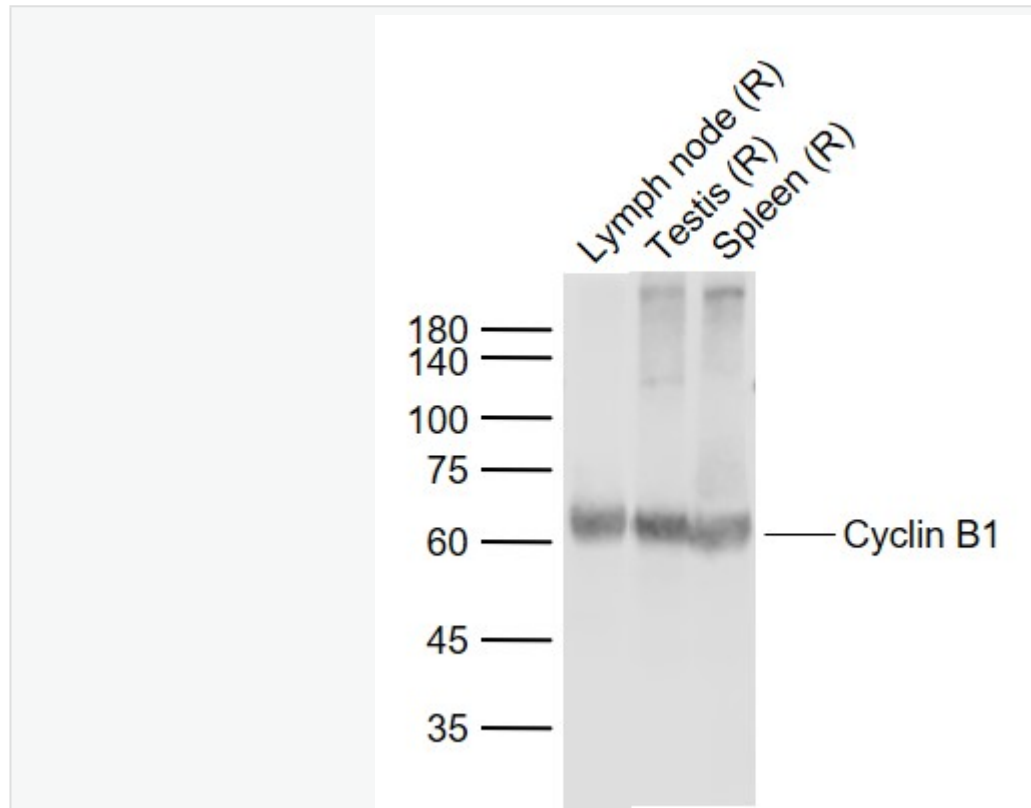
K562 Cell (Human) Lysate at 30 ug

Primary: Anti- Cyclin B1 (SL0572R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 48 kD

Observed band size: 50 kD



Sample:

Lane 1: Lymph node (Rat) Lysate at 40 ug

Lane 2: Testis (Rat) Lysate at 40 ug

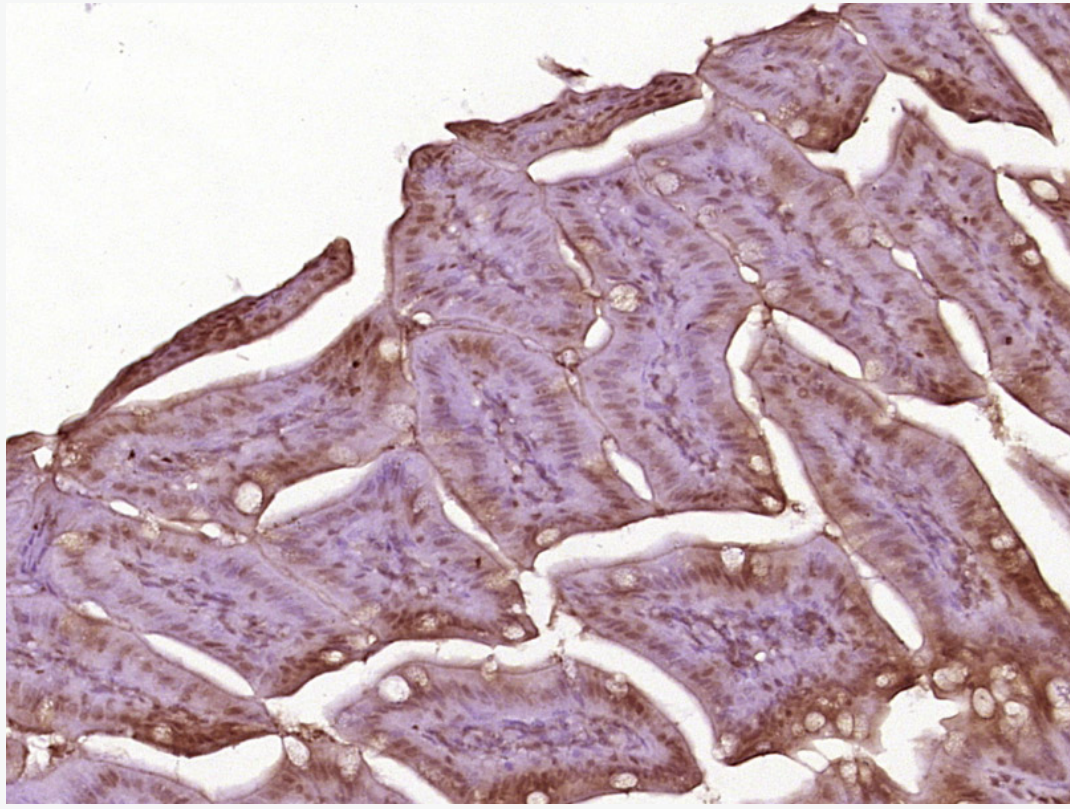
Lane 3: Spleen (Rat) Lysate at 40 ug

Primary: Anti-Cyclin B1 (SL0572R) at 1/1000 dilution

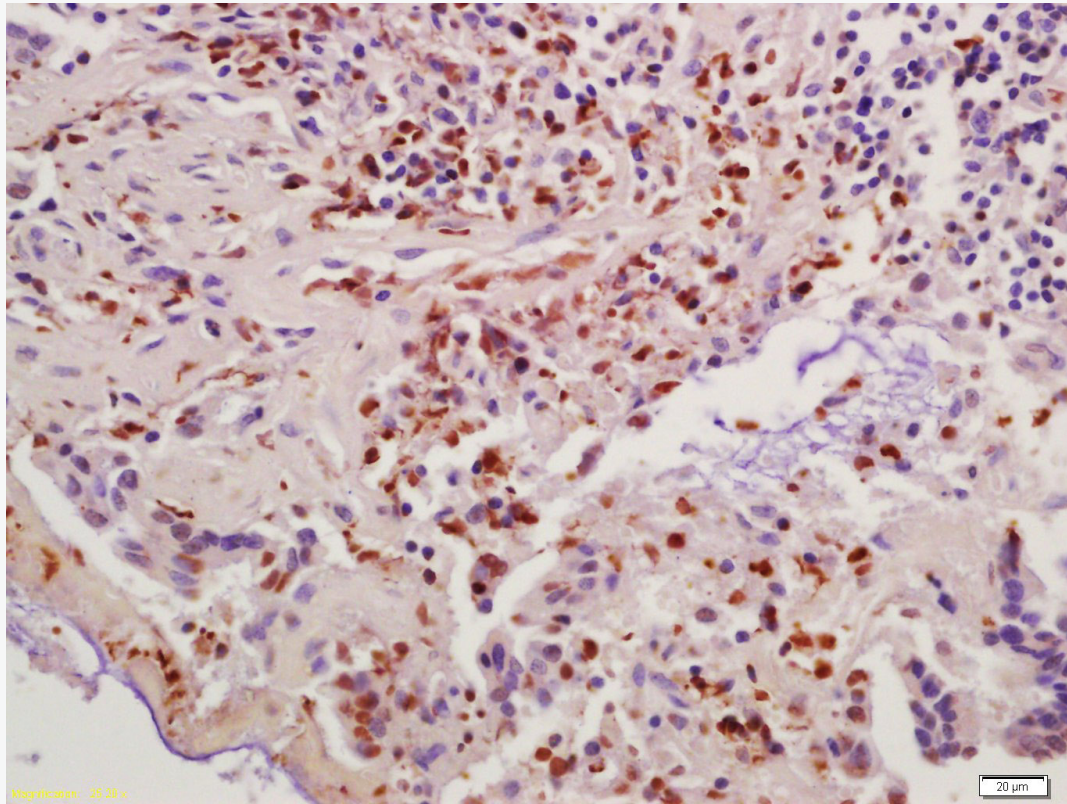
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 55-60 kD

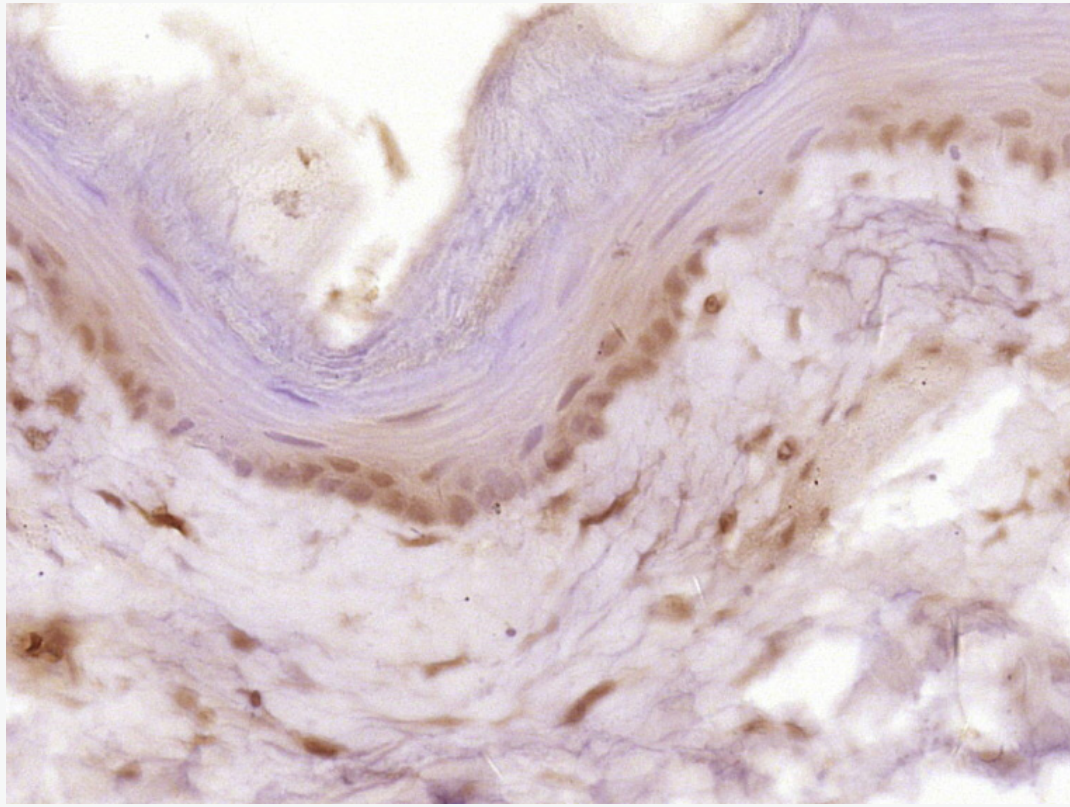
Observed band size: 60 kD



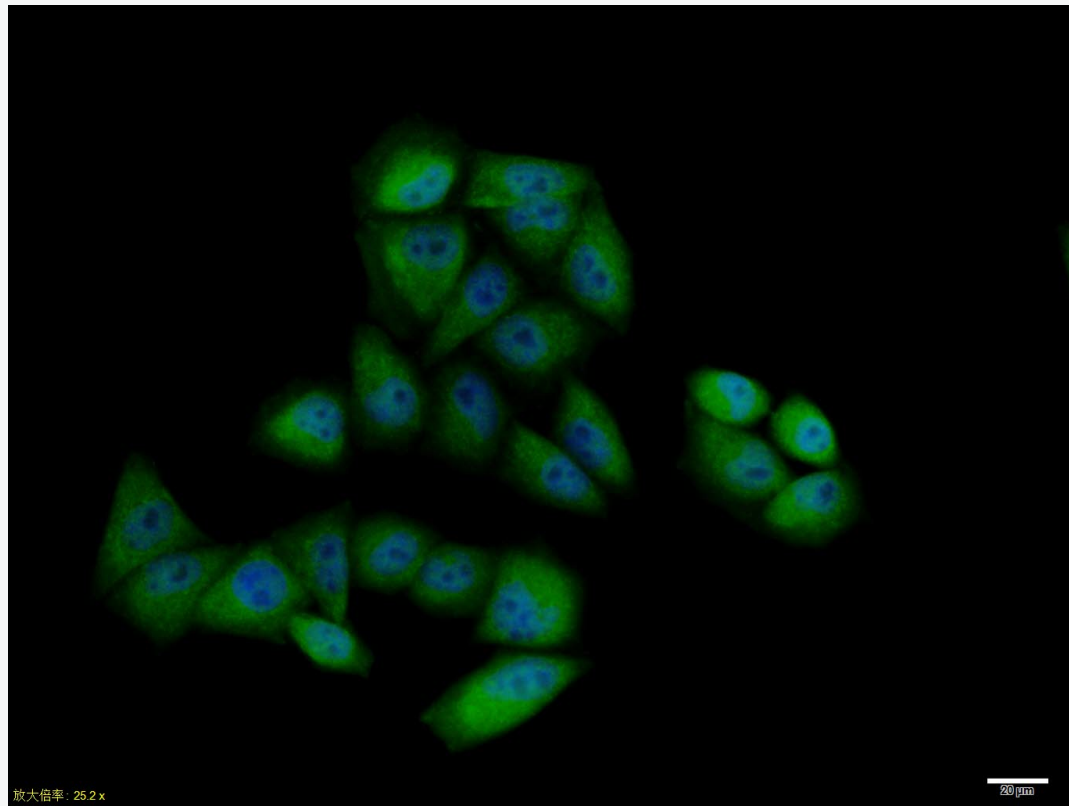
Paraformaldehyde-fixed, paraffin embedded (Mouse small intestine); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 15 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (C) Polyclonal Antibody, Unconjugated (SL0572R) at 1:400 overnight at 4°C, followed by operation according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



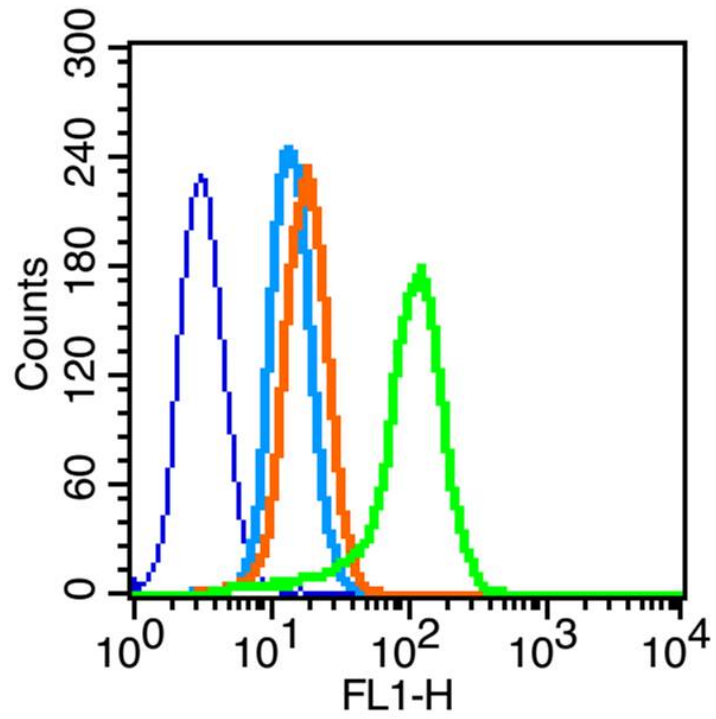
Tissue/cell: human colon carcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (1M, pH 6.0), Boiling bathing for 15min; Block endogenous
by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C fo
Incubation: Anti-Cyclin B1 Polyclonal Antibody, Unconjugated(SL0572R) 1:200, overnight a
followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Paraformaldehyde-fixed, paraffin embedded (Rat esophageal); Antigen retrieval by boiling in citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20min; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Cyclin B1) antibody, Unconjugated (SL0572R) at 1:400 overnight at 4°C, followed by operating according to the instructions of the DAB staining Kit(Rabbit) (sp-0023) instructions and DAB staining.



Hela cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 20 min; Blocking (normal goat serum, C-0005) at 37°C for 20 min; Antibody incubation with (Cyclin B1) polyclonal antibody, Unconjugated (SL0572R) 1:100, 90 minutes at 37°C; followed by a conjugated Goat Anti-Rabbit IgG antibody at 37°C for 90 minutes, DAPI (blue, C02-04002) was used to stain the nuclei.



Blank control (blue line): A549 (blue).

Primary Antibody (green line): Rabbit Anti-Cyclin B1 antibody (SL0572R) .

Dilution: 1 μ g /10⁶ cells;

Isotype Control Antibody (orange line): Rabbit IgG .

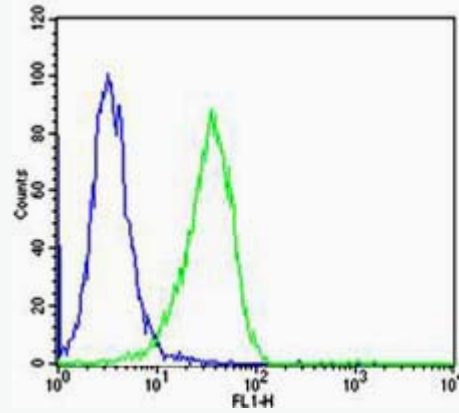
Secondary Antibody (white blue line): F(ab')₂ fragment goat anti-rabbit IgG-FITC.

Dilution: 1 μ g /test.

Protocol

The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 0.1% P for 20 min at room temperature. Cells stained with Primary Antibody for 30 min at room temperature. cells were then incubated in 1 X PBS/2%BSA/10% goat serum to block non-specific protein-p

interactions followed by the antibody for 15 min at room temperature. The secondary antibody
min at room temperature. Acquisition of 20,000 events was performed.



Cell: HeLa

Concentration:1:100

Host/Isotype:Rabbit/IgG

Flow cytometric analysis of primary antibody (Cat#: SL0572R) on HeLa(green) compared with
control in the absence of primary antibody (blue) followed by Alexa Fluor 488-conjugated goat
IgG(H+L) secondary antibody .