

# Anti-Cyclin B1 pS126 (RABBIT) Antibody

Cyclin B1 phospho S126 Antibody Catalog # ASR5240

## Specification

# Anti-Cyclin B1 pS126 (RABBIT) Antibody - Product Information

Host Conjugate Target Species Reactivity Clonality Application Application Note	Rabbit Unconjugated Human Human Polyclonal WB, E, IP, I, LCI This affinity purified antibody has been tested for use in ELISA and western blot. Specific conditions for reactivity should be optimized by the end user. Expect a band ~ 48 kDa in size corresponding to Cyclin B1 by western blotting in the appropriate cell lysate or extract.
Physical State	Liquid (sterile filtered)
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Immunogen	This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to an internal region near amino acids 115-140 of Human Cyclin B1 protein.
Preservative	0.01% (w/v) Sodium Azide

# Anti-Cyclin B1 pS126 (RABBIT) Antibody - Additional Information

Gene ID 891

#### Other Names 891

### Purity

This product is an affinity purified antibody produced by immunoaffinity chromatography using phospho peptide coupled to agarose beads followed by solid phase adsorption(s) against non-phospho peptide and non-specific peptide to remove any unwanted reactivities. This antibody is specific for phosphorylated human Cyclin B1 protein at the pS126 residue. BLAST analysis indicates 100 % homology of the immunizing sequence with Cyclin B1 from human. Cross reactivity may occur with Cyclin B1 from rat, dog and chimpanzee as only a single amino acid change was detected within the immunogen sequence from these sources (91% homology). Partial reactivity may also occur with Cyclin B1 from mouse and hamster where two amino acids changes was noted (83% homology). Minimal reactivity is expected with the non-phosphorylated form of the protein.

**Storage Condition** 



Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

**Precautions Note** This product is for research use only and is not intended for therapeutic or diagnostic applications.

## Anti-Cyclin B1 pS126 (RABBIT) Antibody - Protein Information

Name CCNB1

Synonyms CCNB

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

**Cellular Location** 

Cytoplasm. Nucleus. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome

### Anti-Cyclin B1 pS126 (RABBIT) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

#### Anti-Cyclin B1 pS126 (RABBIT) Antibody - Images



Western blot using Rockland's Affinity Purified anti-Cyclin B1 pS126 antibody shows detection of a band ~48 kDa corresponding to phosphorylated human Cyclin B1 (arrowheads) in various whole cell lysates. Lane 1: Hela (cervical carcinoma) [p/n W09-000-364], Lane 2: H23 (lung carcinoma), Lane 3: Hep3b (Hepatocarcinoma), Lane 4: T98G (Glioblastoma), and Lane 5: Daudi (B cell



lymphoblast) [W09-001-MQ2]. Each lane contains approximately 50  $\mu$ g of lysates, separated by 12% SDS-PAGE using a 5% stack run at 100 volts until the dye front cleared the bottom of the gel. Transfer occurred overnight at 4°C at 15 mAmps. The membrane was blocked with 5% non-fat dry milk in TTBS (p/n B501-0500) for 1 h at room temperature followed by addition of a 1:100 dilution of the antibody allowed to react for 2h at room temperature. After washes with TTBS a 1:5,000 dilution of HRP conjugated Gt-a-Rabbit IgG [H&L] MX (p/n 611-103-122) was added for 1 h at room temperature. After additional washes the membrane was incubated with ECL mix 1:1 for ~3 min. Excess detection solution was drained off and the membrane was exposed to Kodak film X-omat blue XB-1 for about 20 sec. Other detection systems will yield similar results. Personnel Communication, Luca Cote, Temple U.

## Anti-Cyclin B1 pS126 (RABBIT) Antibody - Background

Cyclin B1 (also called CCNB1 and G2/mitotic-specific cyclin B1) is a regulatory protein involved in mitosis. The gene product complexes with p34(cdc2) to form a serine/threonine kinase holoenzyme complex called 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. S126 phosphorylation, the site of phosphorylation recognized by this antibody, is involved in an auto-phosphorylation of the cdk -cyclin complex. Recognition of this phosphorylated site suggests the antibody is useful to detect the active form of the complex and may serve as a marker of mitosis.