



## Cln1 (y-96): sc-33623

### BACKGROUND

Cell cycle progression is controlled at a point late in G<sub>1</sub> designated Start. Passage through Start requires the activity of the cyclin-dependent protein kinase Cdc28. Transition from G<sub>1</sub> to S phase requires the association of Cdc28 with members of the G<sub>1</sub> cyclin family, including Cln1, Cln2 and Cln3 (also designated Daf1 or Whi1). The G<sub>2</sub> to M phase requires the M phase cyclins, Clb1 (also designated Scb1) and Clb2, as well as the G<sub>2</sub> cyclins, Clb3 and Clb4. The S phase cyclins Clb5 and Clb6 coordinate DNA replication with cytokinesis. Expression of the cyclins is controlled by Ubc9 and Cdc34 (also designated Ubc3 or Dna6) via ubiquitin-mediated proteolysis. Esp1, a 180 kDa protein, is released from an inhibitory complex with Pds1 and stimulates the cleavage of Scc1 from chromosomes, which mediates sister chromatid dissociation during the metaphase to anaphase transition of the cell cycle.

### REFERENCES

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5. Seufert, W., Futcher, B. and Jentsch, S. 1995. Role of a ubiquitin-conjugating enzyme in degradation of S- and M-phase cyclins. *Nature* 373: 78-81.
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9. Ciosk, R., Zachariae, W., Michaelis, C., Shevchenko, A., Mann, M. and Nasmyth, K. 1998. An ESP1/PDS1 complex regulates loss of sister chromatid cohesion at the metaphase to anaphase transition in yeast. *Cell* 93: 1067-1076.

### SOURCE

Cln1 (y-96) is a rabbit polyclonal antibody raised against amino acids 451-546 mapping at the C-terminus of Cln1 of *Saccharomyces cerevisiae* origin.

### PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

### APPLICATIONS

Cln1 (y-96) is recommended for detection of Cln1 of *Saccharomyces cerevisiae* origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1–2 µg per 100–500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

### RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

### STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

### RESEARCH USE

For research use only, not for use in diagnostic procedures.

### PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.