# cyclin L1 (C-15): sc-33430



The Power to Question

## **BACKGROUND**

Cell proliferation is controlled at specific stages of the cell cycle by distinct protein kinase complexes. These complexes consist of a catalytic subunit associating with a specific regulatory subunit to form the active kinase. The cyclins, which include cyclin A, B, C, D, E, F, G, H, I, K, L, T and their related proteins, including Dbf4, comprise the regulatory subunits of these kinase complexes. The controlled activation of the kinase complexes at various intervals of the cell cycle is regulated by the availability of the cyclins to the catalytic subunit. Unlike the catalytic subunit, which is expressed continually, the expression and stability of the regulatory subunit fluctuates depending on the stage of the cell cycle and, thereby, regulates the kinase activity.

# **REFERENCES**

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- Redon, R., et al. 2002. Amplicon mapping and transcriptional analysis pinpoint cyclin L as a candidate oncogene in head and neck cancer. Cancer Res. 62: 6211-6217.
- Naaz, A., et al. 2004. Loss of cyclin-dependent kinase inhibitors produces adipocyte hyperplasia and obesity. FASEB J. 18: 1925-1927.
- 4. de Graaf, K., et al. 2004. Characterization of cyclin L2, a novel cyclin with an arginine/serine-rich domain: phosphorylation by DYRK1A and co-localization with splicing factors. J. Biol. Chem. 279: 4612-4624.
- 5. Yang, L., et al. 2004. Cyclin L2, a novel RNA polymerase II-associated cyclin, is involved in pre-mRNA splicing and induces apoptosis of human hepatocellular carcinoma cells. J. Biol. Chem. 279: 11639-11648.
- Sticht, C., et al. 2005. Amplification of cyclin L1 is associated with lymph node metastases in head and neck squamous cell carcinoma (HNSCC). Br. J. Cancer 92: 770-774.

# CHROMOSOMAL LOCATION

Genetic locus: CCNL1 (human) mapping to 3q25.31.

## **SOURCE**

cyclin L1 (C-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of cyclin L1 $\gamma$  of human origin.

## **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-33430 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **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.

#### **APPLICATIONS**

cyclin L1 (C-15) is recommended for detection of cyclin L1 $\gamma$  of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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); non cross-reactive with cyclin L1 $\alpha$ , and  $\beta$ .

cyclin L1 (C-15) is also recommended for detection of cyclin L1 $\gamma$  in additional species, including bovine.

Suitable for use as control antibody for cyclin L1 siRNA (h): sc-44902, cyclin L1 shRNA Plasmid (h): sc-44902-SH and cyclin L1 shRNA (h) Lentiviral Particles: sc-44902-V.

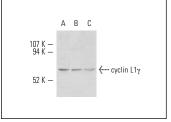
Molecular Weight of cyclin L1γ: 55 kDa.

Positive Controls: HeLa nuclear extract: sc-2120, SW480 cell lysate: sc-2219 or COLO 320DM cell lysate: sc-2226.

## **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

#### DATA



cyclin L1 (C-15): sc-33430. Western blot analysis of cyclin L1 $\gamma$  expression in HeLa nuclear extract (**A**) and SW480 (**B**) and COLO 320DM (**C**) whole cell lysates.

## **PROTOCOLS**

See our web site at www.scbt.com or our catalog for detailed protocols and support products.