

cyclin L1 (H-186): sc-292385

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. Cyclin L1 is a ubiquitously expressed nuclear protein that can be detected in higher levels in thymus. In neck and head squamous cell carcinomas, cyclin L1 can be overexpressed and is therefore often considered a proto-oncogene. It interacts with POLR2A, CDC2L and SFRS2. Cyclin L1 plays a role in the mRNA splicing process regulation.

REFERENCES

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- Naaz, A., et al. 2004. Loss of cyclin-dependent kinase inhibitors produces adipocyte hyperplasia and obesity. *FASEB. J.* 18: 1925-1927.
- 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.
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CHROMOSOMAL LOCATION

Genetic locus: CCNL1 (human) mapping to 3q25.31, Ccnl1 (human) mapping to 3 E1.

SOURCE

cyclin L1 (H-186) is a rabbit polyclonal antibody raised against amino acids 341-526 mapping at the C-terminus of cyclin L1 of human origin.

PRODUCT

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

RESEARCH USE

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

APPLICATIONS

cyclin L1 (H-186) is recommended for detection of cyclin L1 of mouse, rat and human 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).

cyclin L1 (H-186) is also recommended for detection of cyclin L1 in additional species, including canine, equine, bovine and porcine.

Suitable for use as control antibody for cyclin L1 siRNA (h): sc-44902, cyclin L1 siRNA (m): sc-44903, cyclin L1 shRNA Plasmid (h): sc-44902-SH, cyclin L1 shRNA Plasmid (m): sc-44903-SH, cyclin L1 shRNA (h) Lentiviral Particles: sc-44902-V and cyclin L1 shRNA (m) Lentiviral Particles: sc-44903-V.

Molecular Weight of cyclin L1: 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 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.

PROTOCOLS

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


 MONOS
Satisfaction
Guaranteed

Try **cyclin L1 (Q-1): sc-81843**, our highly recommended monoclonal alternative to cyclin L1 (H-186).