

cyclin YL1 (A-12): sc-137410

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, Y 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, thereby regulating kinase activity. Cyclin YL1 (cyclin Y-like 1), also known as CCNYL1 359 amino acid protein that contains one cyclin N-terminal domain and belongs to the cyclin Y subfamily of the cyclin family. Cyclin YL1 exists as three alternatively spliced isoforms and is encoded by a gene located on human chromosome 2.

REFERENCES

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- Kolonin, M.G. and Finley, R.L. 2000. A role for cyclin J in the rapid nuclear division cycles of early *Drosophila* embryogenesis. *Dev. Biol.* 227: 661-672.
- Kong, M., et al. 2000. Cyclin F regulates the nuclear localization of cyclin B1 through a cyclin-cyclin interaction. *EMBO J.* 19: 1378-1388.
- Malara, N.M., et al. 2006. Ageing, hormonal behaviour and cyclin D1 in ductal breast carcinomas. *Breast* 15: 81-89.
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CHROMOSOMAL LOCATION

Genetic locus: CCNYL1 (human) mapping to 2q33.3; Ccnyl1 (mouse) mapping to 1 C2.

SOURCE

cyclin YL1 (A-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of cyclin YL1 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.

Blocking peptide available for competition studies, sc-137410 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

cyclin YL1 (A-12) is recommended for detection of cyclin YL1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 Y, cyclin YL2 or cyclin YL3.

cyclin YL1 (A-12) is also recommended for detection of cyclin YL1 in additional species, including canine.

Suitable for use as control antibody for cyclin YL1 siRNA (h): sc-94474, cyclin YL1 siRNA (m): sc-142659, cyclin YL1 shRNA Plasmid (h): sc-94474-SH, cyclin YL1 shRNA Plasmid (m): sc-142659-SH, cyclin YL1 shRNA (h) Lentiviral Particles: sc-94474-V and cyclin YL1 shRNA (m) Lentiviral Particles: sc-142659-V.

Molecular Weight of cyclin YL1: 41 kDa.

Positive Controls: mouse brain extract: sc-2253.

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) 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.

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 YL1 (D-4): sc-514637**, our highly recommended monoclonal alternative to cyclin YL1 (A-12).