

cyclin YL3 (N-17): sc-246390

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 YL3, also known as CCNYL3, is a 344 amino acid protein belonging to the cyclin family and the cyclin Y subfamily. Cyclin YL3 contains one cyclin N-terminal domain and is encoded by a gene located on human chromosome 16p11.2.

REFERENCES

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- Wikman, H., Kettunen, E. 2006. Regulation of the G₁/S phase of the cell cycle and alterations in the RB pathway in human lung cancer. *Expert Rev. Anticancer Ther.* 6: 515-530.
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CHROMOSOMAL LOCATION

Genetic locus: CCNYL3 (human) mapping to 16p11.2.

SOURCE

cyclin YL3 (N-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of cyclin YL3 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-246390 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

cyclin YL3 (N-17) is recommended for detection of cyclin YL3 of 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).

Suitable for use as control antibody for cyclin YL3 siRNA (h): sc-93005, cyclin YL3 shRNA Plasmid (h): sc-93005-SH and cyclin YL3 shRNA (h) Lentiviral Particles: sc-93005-V.

Molecular Weight of cyclin YL3: 39 kDa.

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.

RESEARCH USE

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

PROTOCOLS

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