

cyclin J (H-46): sc-98308

BACKGROUND

cyclin J is a 372 amino acid protein encoded by the human gene CCNJ located on chromosome 10. cyclin J belongs to the cyclin family and contains one cyclin N-terminal domain. A cyclin forms a complex with its partner cyclin-dependent kinase (Cdk), which activates the protein kinase function of the Cdk. Cyclins are so named because their concentration varies in a cyclical fashion during the cell cycle. They are produced or degraded as needed in order to drive the cell through the different stages of the cell cycle. When its concentrations in the cell are low, the cyclin detaches from the Cdk, inhibiting the activity of the enzyme, probably by causing a protein chain to block the enzymatic site. Cyclin J-associated kinase activity is required for the early embryonic division cycles.

REFERENCES

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3. Kolonin, M.G. 2000. A role for cyclin J in the rapid nuclear division cycles of early *Drosophila* embryogenesis. *Dev. Biol.* 227: 661-672.
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CHROMOSOMAL LOCATION

Genetic locus: CCNJ (human) mapping to 10q24.1; Ccnj (mouse) mapping to 19 C3.

SOURCE

cyclin J (H-46) is a rabbit polyclonal antibody raised against amino acids 144-189 mapping within an internal region of cyclin J 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.

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.

APPLICATIONS

cyclin J (H-46) is recommended for detection of cyclin J 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 J (H-46) is also recommended for detection of cyclin J in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for cyclin J siRNA (h): sc-90703, cyclin J siRNA (m): sc-142656, cyclin J shRNA Plasmid (h): sc-90703-SH, cyclin J shRNA Plasmid (m): sc-142656-SH, cyclin J shRNA (h) Lentiviral Particles: sc-90703-V and cyclin J shRNA (m) Lentiviral Particles: sc-142656-V.

Molecular Weight of cyclin J: 43 kDa.

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.

RESEARCH USE

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