

cyclin J (2126C1a): sc-81064

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 latter's protein kinase function. 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 enzyme's activity, 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

- Bai, C., Richman, R. and Elledge, S.J. 1994. Human cyclin F. *EMBO J.* 13: 6087-6098.
- Kong, M., Barnes, E.A., Ollendorff, V., Donoghue, D.J. 2000. Cyclin F regulates the nuclear localization of cyclin B1 through a cyclin-cyclin interaction. *EMBO J.* 19: 1378-1388.
- Kolonin, M.G. 2000. A role for cyclin J in the rapid nuclear division cycles of early *Drosophila* embryogenesis. *Dev. Biol.* 227: 661-672.
- Fung, T.K. and Poon, R.Y. 2005. A roller coaster ride with the mitotic cyclins. *Semin. Cell Dev. Biol.* 16: 335-342.
- Gerald Karp., *Cell and Molecular Biology: Concepts and Experiments*. New York: Wiley, 148, 165-170 and 624-664. ISBN 0-470-04217-6.
- Makrantonaki, E. and Zouboulis, C.C. 2007. Molecular mechanisms of skin aging: state of the art. *Ann. N.Y. Acad. Sci.* 1119: 40-50.
- Sarasin, A. and Stary, A. 2007. New insights for understanding the transcription-coupled repair pathway. *DNA Repair* 6: 265-269.

CHROMOSOMAL LOCATION

Genetic locus: CCNJ (human) mapping to 10q24.1.

SOURCE

cyclin J (2126C1a) is a mouse monoclonal antibody raised against a recombinant protein corresponding to a region near the C-terminus of cyclin J of human origin.

PRODUCT

Each vial contains 100 µg IgG₁ in 1.0 ml of PBS with < 0.1% sodium azide and 1.0% stabilizer protein.

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 for detailed protocols and support products.

APPLICATIONS

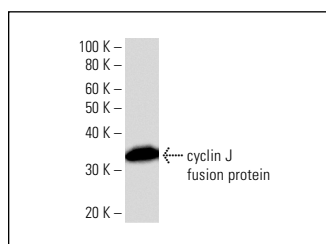
cyclin J (2126C1a) is recommended for detection of cyclin J of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)].

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

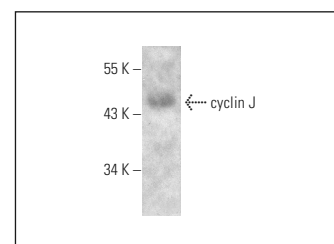
Molecular Weight of cyclin J: 43 kDa.

Positive Controls: human platelet extract: sc-363773.

DATA



cyclin J (2126C1a): sc-81064 Western Blot analysis of human recombinant cyclin J fusion protein.



cyclin J (2126C1a): sc-81064. Western blot analysis of cyclin J expression in human platelet tissue extract.

RESEARCH USE

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