cyclin F (C-20): sc-952



The Power to Question

BACKGROUND

Cyclins are the regulatory subunits of Cdc2 p34 and related cyclin dependent kinases (Cdks) which play critical roles in the control of cell cycle progression. The catalytic subunit for cyclin A and B is Cdc2 p34 kinase. The Cdc2-cyclin B complex controls G_2 to M transition whereas Cdc2-cyclin A regulates S phase progression. The G_1 to S transition, however, appears to be controlled by the G_1 cyclins. Cyclin D1 accumulates during G_1 and associates with Cdk2, Cdk4 and Cdk5. Cyclin E and Cdk2 interact during the G_1 to S transition. Cyclin F is the largest of the cyclins described to date. It contains an extensive PEST-rich C-terminus and a cyclin box region that is most related to cyclins A and B. Cyclin F is ubiquitously expressed in human cells but fluctuates dramatically through the cell cycle, peaking in G_2 like cyclin A and decreasing prior to decline of cyclin B. Cyclin F exhibits regulated subcellular localization, being localized in the nucleus in most cells, with a significant percentage of cells showing only perinuclear staining.

CHROMOSOMAL LOCATION

Genetic locus: CCNF (human) mapping to 16p13.3.

SOURCE

cyclin F (C-20) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the C-terminus of cyclin F of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-952 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

cyclin F (C-20) is recommended for detection of cyclin F of 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), immunohistochemistry (including paraffin-embedded sections) (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 F siRNA (h): sc-35138, cyclin F shRNA Plasmid (h): sc-35138-SH and cyclin F shRNA (h) Lentiviral Particles: sc-35138-V.

Molecular Weight of cyclin F: 110 kDa.

Positive Controls: A-431 whole cell lysate: sc-2201 or Ramos nuclear extract: sc-2153.

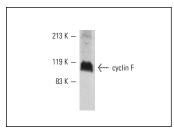
STORAGE

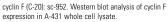
Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

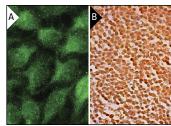
RESEARCH USE

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

DATA







cyclin F (C-20): sc-952. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear and cytoplasmic localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human lymph node tissue showing nuclear staining of cells in germinal centers and cells in non-germinal centers (B)

SELECT PRODUCT CITATIONS

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- 4. Ek, S., et al. 2004. Increased expression of Ki-67 in mantle cell lymphoma is associated with de-regulation of several cell cycle regulatory components, as identified by global gene expression analysis. Haematologica 89: 686-695.
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- Cope, G.A., et al. 2006. Targeted silencing of Jab1/Csn5 in human cells downregulates SCF activity through reduction of F-box protein levels. BMC Biochem. 7: 1.
- Fung, T.K., et al. 2007. Specialized roles of the two mitotic cyclins in somatic cells: cyclin A as an activator of M phase-promoting factor. Mol. Biol. Cell 18: 1861-1873.
- 8. D'Angiolella, V., et al. 2010. SCF(Cyclin F) controls centrosome homeostasis and mitotic fidelity through CP110 degradation. Nature 466: 138-142.



Try cyclin F (B-6): sc-515207 or cyclin F (2123D1a): sc-81242, our highly recommended monoclonal alternatives to cyclin F (C-20).