SANTA CRUZ BIOTECHNOLOGY, INC.

cyclin C (120-303): sc-4423 WB

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The proliferation of eukaryotic cells is controlled at specific points in the cell cycle, particularly at the G_1 to S and the G_2 to M transitions. It is well established that the Cdc2 p34-cyclin B protein kinase plays a critical role in the G_2 to M transition while cyclin A associates with Cdk2 p33 and functions in S phase. Considerable effort directed towards the identification of G_1 cyclins has led to the isolation of cyclin D, cyclin C and cyclin E. Cyclin D corresponds to a putative human oncogene designated PRAD1 which maps at the site of the BCL1 rearrangement in certain lymphomas and leukemias. Cyclin C complexes with the cyclin dependent kinase Cdk8. The cyclin C/Cdk8 complex has been shown to have kinase activity toward the carboxy terminal domain of RNA polymerase II. Two complexes have been identified which contain cyclin C/Cdk8. A very large complex of over has been found to contain the large subunit of RNA polymerase II. A smaller complex has also been identified.

REFERENCES

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8. Sage, J. 2004. Cyclin C makes an entry into the cell cycle. Dev. Cell 6: 607-608.
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CHROMOSOMAL LOCATION

Genetic locus: CCNC (human) mapping to 6q21; Ccnc (mouse) mapping to 4 A3.

SOURCE

cyclin C (120-303) is expressed in *E. coli* as a 35 kDa tagged fusion protein corresponding to amino acids 120-303 of cyclin C of human origin.

PRODUCT

cyclin C (120-303) is purified from bacterial lysates (>98%) by glutathione agarose affinity chromatography; supplied as 10 µg in 0.1 ml SDS-PAGE loading buffer.

APPLICATIONS

cyclin C (120-303) is suitable as a Western blotting control for sc-1061, sc-5333 and sc-5610.

STORAGE

Store at -20° C; stable for one year from the date of shipment.

RESEARCH USE

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