

cyclin G1 (1-249): sc-4099 WB

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 G2/M transition whereas Cdc2-cyclin A regulates S phase progression. The G1 to S transition, however, appears to be controlled by the G1 cyclins. Cyclin D1 accumulates during G1 and associates with Cdk2, Cdk4 and Cdk5. Cyclin E and Cdk2 interact during the G1/S transition. Cyclin G contains a typical N terminal cyclin box and a carboxy terminal domain sequence homologous to the tyrosine phosphorylation site of the epidermal growth factor receptor. Cyclin G expression is induced within 3 hours after growth stimulation and remains elevated with no apparent cell cycle dependency.

REFERENCES

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SOURCE

Cyclin G1 (1-249) is expressed in *E. coli* as a 32 kDa polyhistidine tagged fusion protein corresponding to amino acids 47-295 mapping at the carboxy terminus of cyclin G1 of human origin.

PRODUCT

Cyclin G1 (1-249) is purified from bacterial lysates (>98%) by Ni⁺⁺ affinity chromatography; supplied as 10 µg protein in 0.1 ml SDS-PAGE loading buffer.

STORAGE

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

APPLICATIONS

Cyclin G1 (1-249) is suitable as a Western blotting control for sc-320 and sc-851.

RESEARCH USE

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