

Cdk2 (1-298): sc-4069

BACKGROUND

In vertebrates, as in yeast, multiple cyclins have been identified, including a total of eight such regulatory proteins in mammals. In contrast to the situation in yeast, the Cdc2 p34 kinase is not the only catalytic subunit identified in vertebrates that can interact with cyclins. While Cdc2 p34 is essential for the G2 to M transition in vertebrate cells, a second Cdc2 related kinase has also been implicated in cell cycle control. This protein, designated cyclin dependent kinase 2 (Cdk2) p33, also binds to cyclins and its kinase activity is temporally regulated during the cell cycle. Several additional Cdc2 p34 related cyclin dependent kinases have been identified. These include Cdk3, Cdk4, Cdk5, PCTAIRE-1, PCTAIRE-2, PCTAIRE-3, Cdk6, Cdk7 and Cdk8.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: CDK2 (human) mapping to 12q13.2; Cdk2 (mouse) mapping to 10 D3.

SOURCE

Cdk2 (1-298) is expressed in *E. coli* as a 62 kDa tagged fusion protein corresponding to amino acids 1-298 representing full length Cdk2 of human origin.

PRODUCT

Cdk2 (1-298) is purified from bacterial lysates (>98%) by glutathione agarose affinity chromatography; supplied as 50 µg in 50 µl of 1xPBS, 50% glycerol and 5mM DTT.

Available as a Western blotting control; 10 µg in 0.1 ml SDS-PAGE loading buffer, Cdk2 (1-298): sc-4069 WB.

APPLICATIONS

Cdk2 (1-298) is suitable as a Western blotting control for sc-163, sc-748 and sc-6248.

SELECT PRODUCT CITATIONS

1. Acevedo-Duncan, M., et al. 2002. Human glioma PKC- α and PKC- β II phosphorylate cyclin-dependent kinase activating kinase during the cell cycle. *Cell Prolif.* 35: 23-36.

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.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.