

Cdc2 p34 (m): 293T Lysate: sc-119124

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, Cdk8 and KKIALRE.

REFERENCES

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2. Morla, A.O., et al. 1989. Reversible tyrosine phosphorylation of Cdc2: dephosphorylation accompanies activation during entry into mitosis. *Cell* 58: 193-203.
3. Pines, J., et al. 1989. Isolation of a human cyclin cDNA: evidence for cyclin mRNA and protein regulation in the cell cycle and for interaction with p34Cdc2. *Cell* 58: 833-846.
4. Kobayashi, H., et al. 1991. Cyclins and their partners during *Xenopus* oocyte maturation. *Cold Spring Harb. Symp. Quant. Biol.* 56:437-56447.
5. Xiong, Y., et al. 1991. Human D-type cyclin. *Cell* 65: 691-699.
6. Pagano, M., et al. 1992. Cyclin A is required at two points in the human cell cycle. *EMBO J.* 11: 961-971.
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CHROMOSOMAL LOCATION

Genetic locus: Cdc2a (mouse) mapping to 10 B5.3.

PRODUCT

Cdc2 p34 (m): 293T Lysate represents a lysate of mouse Cdc2 p34 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

RESEARCH USE

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

APPLICATIONS

Cdc2 p34 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive Cdc2 p34 antibodies. Recommended use: 10-20 µl per lane.

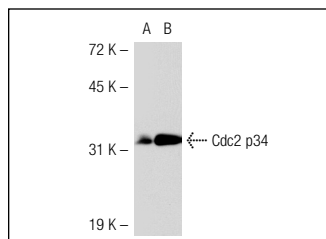
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Cdc2 p34 (B322): sc-56261 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse Cdc2 p34 expression in Cdc2 p34 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

DATA



Cdc2 p34 (B322): sc-56261. Western blot analysis of Cdc2 p34 expression in non-transfected: sc-117752 (A) and mouse Cdc2 p34 transfected: sc-119124 (B) 293T whole cell lysates.

PROTOCOLS

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