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SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

Cdk2 (m): 293T Lysate: sc-119146

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

1. Riabowol, K., Draetta, G., Brizuela, L., Vandre, D. and Beach, D. 1989. The Cdc2 kinase is a nuclear protein that is essential for mitosis in mammalian cells. *Cell* 57: 393-401.
2. Pines, J. and Hunter, T. 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.
3. Xiong, Y., Connolly, T., Futcher, B. and Beach, D. 1991. Human D-type cyclin. *Cell* 65: 691-699.
4. Pagano, M., Pepperkok, R., Verde, F., Ansorge, W. and Draetta, G. 1992. Cyclin A is required at two points in the human cell cycle. *EMBO J.* 11: 961-971.
5. Elledge, S.J., Richman, R., Hall, F.L., Williams, R.T., Lodgson, N. and Harper, J.W. 1992. Cdk2 encodes a 33 kDa cyclin A-associated protein kinase and is expressed before Cdc2 in the cell cycle. *Proc. Natl. Acad. Sci. USA* 89: 2907-2911.
6. Strausfeld, U.P., Howell, M., Rempel, R., Maller, J.L., Hunt, T. and Blow, J.J. 1994. Cip1 blocks the initiation of DNA replication in *Xenopus* extracts by inhibition of cyclin-dependent kinases. *Curr. Biol.* 4: 876-883.
7. Baptist, M., Lamy, F., Gannon, J., Hunt, T., Dumont, J.E. and Roger, P.P. 1996. Expression and subcellular localization of Cdk2 and Cdc2 kinases and their common partner cyclin A in thyroid epithelial cells: comparison of cyclic AMP-dependent and -independent cell cycles. *J. Cell. Physiol.* 166: 256-273.
8. Strausfeld, U.P., Howell, M., Descombes, P., Chevalier, S., Rempel, R.E., Adamczewski, J., Maller, J.L., Hunt, T. and Blow, J.J. 1996. Both cyclin A and cyclin E have S-phase promoting (SPF) activity in *Xenopus* egg extracts. *J. Cell Sci.* 109: 1555-1563.
9. Goodger, N.M., Gannon, J., Hunt, T. and Morgan, P.R. 1997. Cell cycle regulatory proteins—an overview with relevance to oral cancer. *Oral Oncol.* 33: 61-73.

CHROMOSOMAL LOCATION

Genetic locus: Cdk2 (mouse) mapping to 10 D3.

RESEARCH USE

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

PRODUCT

Cdk2 (m): 293T Lysate represents a lysate of mouse Cdk2 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

Cdk2 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive Cdk2 antibodies. Recommended use: 10-20 µl per lane.

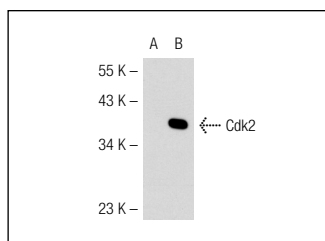
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Cdk2 (AN4.3): sc-53220 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse Cdk2 expression in Cdk2 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

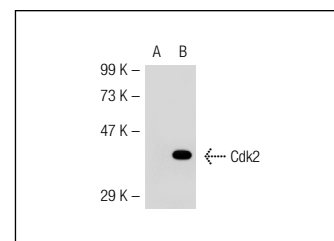
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



Cdk2 (AN4.3): sc-53220. Western blot analysis of Cdk2 expression in non-transfected: sc-117752 (A) and mouse Cdk2 transfected: sc-119146 (B) 293T whole cell lysates.



Cdk2 (O.N.198): sc-70829. Western blot analysis of Cdk2 expression in non-transfected: sc-117752 (A) and mouse Cdk2 transfected: sc-119146 (B) 293T whole cell lysates.

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.

PROTOCOLS

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