



# SZABO SCANDIC

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Diagnostik & molekulare Diagnostik



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### Zuschläge

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- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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# p27 (m): 293T Lysate: sc-122312

## BACKGROUND

Cell cycle progression is regulated by a series of cyclin-dependent kinases consisting of catalytic subunits, designated Cdk, as well as activating subunits, designated cyclins. Orderly progression through the cell cycle requires the activation and inactivation of different cyclin-Cdks at appropriate times. A series of proteins has recently been described that function as "mitotic inhibitors". These include p21, the levels of which are elevated upon DNA damage in G<sub>1</sub> in a p53-dependent manner; p16; and a more recently described p16-related inhibitor designated p15. A p21-related protein, p27, has been described as a negative regulator of G<sub>1</sub> progression and speculated to function as a possible mediator of TGFβ-induced G<sub>1</sub> arrest. p27 interacts strongly with D-type cyclins and Cdk4 *in vitro* and, to a lesser extent, with cyclin E and Cdk2.

## REFERENCES

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- Xiong, Y., Hannon, G.J., Zhang, H., Casso, D., Kobayashi, R. and Beach, D. 1993. p21 is a universal inhibitor of cyclin kinases. *Nature* 366: 701-704.
- Serrano, M., Hannon, G.J. and Beach, D. 1993. A new regulatory motif in cell cycle control causing specific inhibition of cyclin D/Cdk4. *Nature* 366: 704-707.
- Hannon, G.J. and Beach, D. 1994. p15INK4B is a potential effector of TGFβ-induced cell cycle arrest. *Nature* 371: 257-260.
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- Hengst, L., Dulic, V., Slingerland, J.M., Lees, E. and Reed, S.I. 1994. A cell cycle-regulated inhibitor of cyclin-dependent kinases. *Proc. Natl. Acad. Sci. USA* 91: 5291-5295.
- Polyak, K., Lee, M.H., Erdjument-Bromage, H., Koff, A., Roberts, J.M., Tempst, P. and Massagué, J. 1994. Cloning of p27<sup>KIP1</sup>, a cyclin-dependent kinase inhibitor and a potential mediator of extracellular antimutagenic signals. *Cell* 78: 59-66.
- Toyoshima, H. and Hunter, T. 1994. p27, a novel inhibitor of G<sub>1</sub> cyclin-Cdk protein kinase activity, is related to p21. *Cell* 78: 67-74

## 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](http://www.scbt.com) for detailed protocols and support products.

## CHROMOSOMAL LOCATION

Genetic locus: Cdkn1b (mouse) mapping to 6 G1.

## PRODUCT

p27 (m): 293T Lysate represents a lysate of mouse p27 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

## APPLICATIONS

p27 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive p27 antibodies. Recommended use: 10-20 µl per lane.

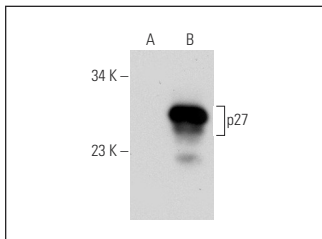
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

p27 (F-8): sc-1641 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse p27 expression in p27 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

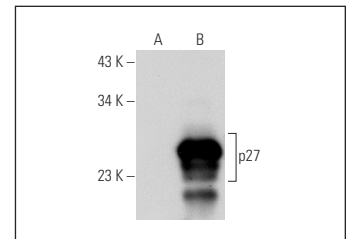
## RECOMMENDED SUPPORT REAGENTS

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



p27 (F-8): sc-1641. Western blot analysis of p27 expression in non-transfected: sc-117752 (A) and mouse p27 transfected: sc-122312 (B) 293T whole cell lysates.



p27 (SX53G8.5): sc-53871. Western blot analysis of p27 expression in non-transfected: sc-117752 (A) and mouse p27 transfected: sc-122312 (B) 293T whole cell lysates.

## RESEARCH USE

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