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Diagnostik & molekulare Diagnostik



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Lieferung & Zahlungsart

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Zuschläge

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p19 (h2): 293T Lysate: sc-174520

BACKGROUND

The normal progression of cells through the cell cycle is under the control of the cyclin dependent protein kinases Cdk4 and Cdk6, which are subject to inhibition by the mitotic inhibitory protein, p16. Isolated members of the p16 family have been designated p15, p18 and p19. p15 expression is upregulated approximately 30-fold in TGF β -treated human keratinocytes, suggesting that p15 may function as an effector of TGF β -mediated cell cycle arrest through inhibition of Cdk4 and Cdk6 kinases. The gene encoding p15 has been mapped to chromosome 9p21 at a position adjacent to the p16 gene, at a site of frequent chromosomal abnormality in human tumors. Two p16-related proteins, p19 and p18, specifically inhibit the kinase activities of Cdk4 and Cdk6 but do not affect those of cyclin E-Cdk2, cyclin A-Cdk2 or cyclin B-Cdc2 complexes. p19 is expressed at maximal level during S phase, while overexpression of p19 leads to G₁ arrest.

REFERENCES

1. Serrano, M., et al. 1993. A new regulatory motif in cell cycle control causing specific inhibition of cyclin D/Cdk4. *Nature* 366: 704-707.
2. Kamb, A., et al. 1994. A cell cycle regulator potentially involved in genesis of many tumor types. *Science* 264: 436-440.
3. Hannon, G.J., et al. 1994. p15INK4b is a potential effector of TGF β -induced cell cycle arrest. *Nature* 371: 257-261.
4. Guan, K.L., et al. 1994. Growth suppression by p18, a p16INK4/MTS1 and p14INK4b/MTS2-related Cdk6 inhibitor, correlates with wildtype pRb function. *Genes Dev.* 8: 2939-2952.
5. Hussussian, C.J., et al. 1994. Germline p16 mutations in familial melanoma. *Nat. Genet.* 8: 15.
6. Cairns, P., et al. 1994. Rates of p16MTS1 mutations in primary tumors with 9p loss. *Science* 265: 415-417.
7. Hirai, H., et al. 1995. Novel INK4 proteins, p19 and p18, are specific inhibitors of the cyclin D-dependent kinases Cdk4 and Cdk6. *Mol. Cell. Biol.* 15: 2672-2681.

CHROMOSOMAL LOCATION

Genetic locus: CDKN2D (human) mapping to 19p13.2.

PRODUCT

p19 (h2): 293T Lysate represents a lysate of human p19 transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

p19 (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive p19 antibodies. Recommended use: 10-20 μ l per lane.

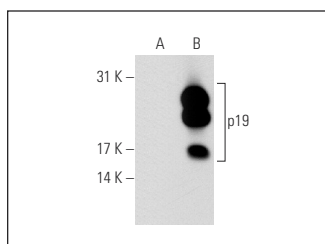
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

p19 (6A150): sc-71810 is recommended as a positive control antibody for Western Blot analysis of enhanced human p19 expression in p19 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

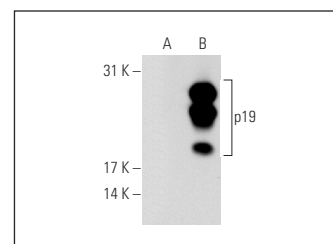
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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



p19 (6A150): sc-71810. Western blot analysis of p19 expression in non-transfected: sc-117752 (A) and human p19 transfected: sc-174520 (B) 293T whole cell lysates.



p19 (2B2.59): sc-71809. Western blot analysis of p19 expression in non-transfected: sc-117752 (A) and human p19 transfected: sc-174520 (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.

RESEARCH USE

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

PROTOCOLS

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