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E2F-1 (h): 293T Lysate: sc-116137

BACKGROUND

The human retinoblastoma gene product appears to play an important role in the negative regulation of cell proliferation. Functional inactivation of Rb can be mediated either through mutation or as a consequence of interaction with DNA tumor virus encoded proteins. Of all the Rb associations described to date, the identification of a complex between Rb and the transcription factor E2F most directly implicates Rb in regulation of cell proliferation. E2F was originally identified through its role in transcriptional activation of the adenovirus E2 promoter. Sequences homologous to the E2F binding site have been found upstream of a number of genes that encode proteins with putative functions in the G₁ and S phases of the cell cycle. E2F-1 is a member of a broader family of transcription regulators including E2F-2, E2F-3, E2F-4, E2F-5 and E2F-6, each of which forms heterodimers with a second protein, DP-1, forming an "active" E2F transcriptional regulatory complex.

REFERENCES

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9. Hao, H., Dong, Y., Bowling, M.T., Gomez-Gutierrez, J.G., Zhou, H.S. and McMasters, K.M. 2007. E2F-1 induces melanoma cell apoptosis via PUMA up-regulation and Bax translocation. *BMC Cancer* 7:24.

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.

CHROMOSOMAL LOCATION

Genetic locus: E2F1 (human) mapping to 20q11.22.

PRODUCT

E2F-1 (h): 293T Lysate represents a lysate of human E2F-1 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

E2F-1 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive E2F-1 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.

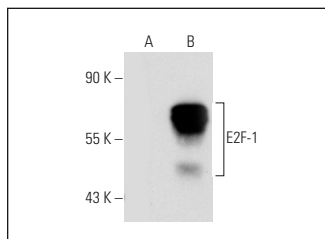
E2F-1 (KH20): sc-56662 is recommended as a positive control antibody for Western Blot analysis of enhanced human E2F-1 expression in E2F-1 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

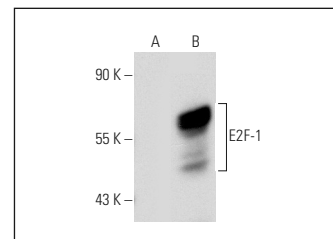
To ensure optimal results, the following support reagents are recommended:

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



E2F-1 (KH20): sc-56662. Western blot analysis of E2F-1 expression in non-transfected: sc-117752 (A) and human E2F-1 transfected: sc-116137 (B) 293T whole cell lysates.



E2F-1 (KH95): sc-251. Western blot analysis of E2F-1 expression in non-transfected: sc-117752 (A) and human E2F-1 transfected: sc-116137 (B) 293T whole cell lysates.

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.