

TFIIIB90-1 (h): 293T Lysate: sc-111635

BACKGROUND

RNA polymerase (pol) III synthesizes tRNA, 5s rRNA, 7SL RNA and U6 snRNA and is overexpressed in many transformed cell lines and tumors *in vivo*, since cells must duplicate its protein components before division. Therefore, in order to maintain rapid growth, cells must produce a high level of Pol III transcribed RNA, which requires the presence of the TFIIIB and TFIIIC2 transcription factor complexes. The TFIIIC2 complex is composed of five subunits, TFIIIC220, TFIIIC110, TFIIIC102, TFIIIC90 and TFIIIC63, that are overexpressed in adenovirus transformed cells as well as in malignant cells *in vivo*, such as ovarian carcinomas. TFIIIC2 recruits RNA pol III and TFIIIB to promoter elements and may be a key component in the deregulation of malignant cells. The TFIIIB complex includes the TATA-binding protein (TBP), TFIIIB-related factor 1 (TFIIIB90, BRF1) and TFIIIB", the expression of which are also upregulated in trans-formed cells. In many carcinomas, the tumor suppressors retinoblastoma (RB) and p53 are inactivated, which affects their ability to bind and inactivate the function of TFIIIB.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: BRF1 (human) mapping to 14q32.33.

PRODUCT

TFIIIB90-1 (h): 293T Lysate represents a lysate of human TFIIIB90-1 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

TFIIIB90-1 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive TFIIIB90-1 antibodies. Recommended use: 10-20 µl per lane.

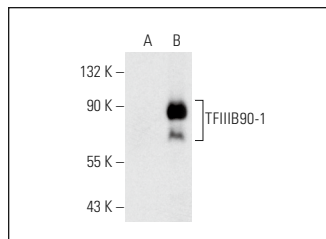
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

TFIIIB90-1/4 (B-8): sc-271970 is recommended as a positive control antibody for Western Blot analysis of enhanced human TFIIIB90-1 expression in TFIIIB90-1 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



TFIIIB90-1/4 (B-8): sc-271970. Western blot analysis of TFIIIB90-1 expression in non-transfected: sc-117752 (A) and human TFIIIB90-1 transfected: sc-111635 (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.