SANTA CRUZ BIOTECHNOLOGY, INC.

YY1 (m): 293T Lysate: sc-124689

BACKGROUND

The YY1 transcription factor, also known as NF-E1 (human) and δ or UCRBP (mouse) is of interest due to its diverse effects on a wide variety of target genes. YY1 is broadly expressed in a wide range of cell types and contains four C-terminal zinc finger motifs of the Cys-Cys-His-His type and an unusual set of structural motifs at its N-terminal end. It binds to downstream elements in several vertebrate ribosomal protein genes, where it apparently acts positively to stimulate transcription and can act either negatively or positively in the context of the immunoglobulin κ 3' enhancer and immunoglobulin heavy-chain μE1 site as well as the P5 promoter of the adeno-associated virus. It thus appears that YY1 is a bifunctional protein, capable of functioning as an activator in some transcriptional control elements and a repressor in others.

REFERENCES

1. Hariharan, N., et al. 1991. δ, a transcription factor that binds to downstream elements in several polymerase II promoters, is a functionally versatile zinc-finger protein. Proc. Natl. Acad. Sci. USA 88: 9799-9803.
2. Shi, Y., et al. 1991. Transcriptional repression by YY1, a human GLI-krüppel-related protein, and relief of repression by adenovirus E1A protein. Cell 67: 377-388.
3. Park, K., et al. 1991. Isolation of a candidate repressor/activator, NF-E1 (YY1, δ), that binds to the immunoglobulin κ 3' enhancer and the immunoglobulin heavy-chain μE1 site. Proc. Natl. Acad. Sci. USA 88: 9804-9808.
4. Riggs, K.J., et al. 1991. Common factor 1 is a transcriptional activator which binds in the c-Myc promoter, the skeletal α-Actin promoter, and the immunoglobulin heavy-chain enhancer. Mol. Cell. Biol. 11: 1765-1769.
5. Flanagan, J.R., et al. 1992. Cloning of a negative transcription factor that binds to the upstream conserved region of Moloney murine leukemia virus. Mol. Cell. Biol. 12: 38-44.
6. Sáfrány, G., et al. 1993. Characterization of the mouse gene that encodes the δ/YY1/NF-E1/UCRBP transcription factor. Proc. Natl. Acad. Sci. USA 90: 5559-5563.

CHROMOSOMAL LOCATION

Genetic locus: Yy1 (mouse) mapping to 12 F1.

PRODUCT

YY1 (m): 293T Lysate represents a lysate of mouse YY1 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

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.

APPLICATIONS

YY1 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive YY1 antibodies. Recommended use: 10-20 µl per lane.

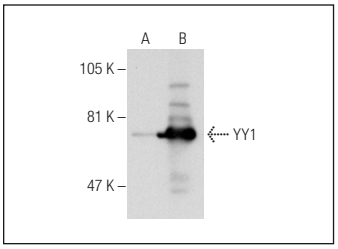
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

YY1 (H-10): sc-7341 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse YY1 expression in YY1 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



YY1 (H-10): sc-7341. Western blot analysis of YY1 expression in non-transfected: sc-117752 (**A**) and mouse YY1 transfected: sc-124689 (**B**) 293T whole cell lysates.

RESEARCH USE

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