

YY1 (H-414): sc-1703

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 μ E1 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.

CHROMOSOMAL LOCATION

Genetic locus: YY1 (human) mapping to 14q32.2; Yy1 (mouse) mapping to 12 F1.

SOURCE

YY1 (H-414) is a rabbit polyclonal antibody raised against amino acids 1-414 representing full length YY1 of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-1703 X, 200 μ g/0.1 ml.

APPLICATIONS

YY1 (H-414) is recommended for detection of YY1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

YY1 (H-414) is also recommended for detection of YY1 in additional species, including canine and bovine.

Suitable for use as control antibody for YY1 siRNA (h): sc-36863, YY1 siRNA (m): sc-36864, YY1 shRNA Plasmid (h): sc-36863-SH, YY1 shRNA Plasmid (m): sc-36864-SH, YY1 shRNA (h) Lentiviral Particles: sc-36863-V and YY1 shRNA (m) Lentiviral Particles: sc-36864-V.

YY1 (H-414) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of cleaved YY1: 40 kDa.

Molecular Weight of YY1: 68 kDa.

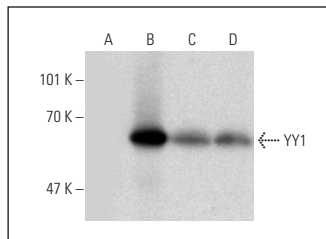
RESEARCH USE

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

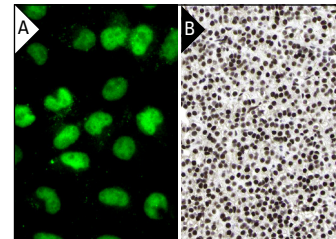
STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

DATA



YY1 (H-414): sc-1703. Western blot analysis of YY1 expression in non-transfected: sc-117752 (A) and mouse YY1 transfected: sc-124689 (B) 293T whole cell lysates and Jurkat (C) and BJAB (D) nuclear extracts.



YY1 (H-414): sc-1703. Immunofluorescence staining of formalin-fixed HeLa cells showing nuclear localization. Kindly provided by Yang Xiang, Ph.D., Division of Newborn Medicine, Boston Children's Hospital, Cell Biology Department, Harvard Medical School (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human parathyroid gland tissue showing nuclear staining of glandular cells. Kindly provided by The Swedish Human Protein Atlas (HPA) program (B).

SELECT PRODUCT CITATIONS

1. Yu, J.H., et al. 1999. Role of the Sp family of transcription factors in the ontogeny of growth hormone receptor gene expression. *J. Biol. Chem.* 274: 34327-34336.
2. Takaoka, N., et al. 2011. Analysis of the regulation of fatty acid binding protein 7 expression in human renal carcinoma cell lines. *BMC Mol. Biol.* 12: 31.
3. Jacob, E., et al. 2011. Dual function of polycomb group proteins in differentiated murine T helper (CD4⁺) cells. *J. Mol. Signal.* 6: 5.
4. Jokela, T.A., et al. 2011. Cellular content of UDP-N-acetylhexosamines controls hyaluronan synthase 2 expression and correlates with O-linked N-acetylglucosamine modification of transcription factors YY1 and SP1. *J. Biol. Chem.* 286: 33632-33640.
5. Chang, P.J., et al. 2011. Role of the cellular transcription factor YY1 in the latent-lytic switch of Kaposi's sarcoma-associated herpesvirus. *Virology* 413: 194-204.
6. Hervouet, E., et al. 2012. Kinetics of DNA methylation inheritance by the Dnmt1-including complexes during the cell cycle. *Cell Div.* 7: 5.
7. Landvik, N.E., et al. 2012. Molecular characterization of a cancer-related single nucleotide polymorphism in the pro-inflammatory interleukin-1B gene. *Mol. Carcinog.* 51: E168-E175.

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Try **YY1 (H-10): sc-7341**, our highly recommended monoclonal alternative to YY1 (H-414). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **YY1 (H-10): sc-7341**.