

TFII-I (H-58): sc-28716

BACKGROUND

Initiation of transcription of eukaryotic genes requires the association of large multimeric protein complexes that involve RNA polymerase II and a variety of basal transcription factors, including members of the TFII protein family. TFII proteins complex with Pol II and initiate transcription by binding to the core promoter elements, such as TATA box sequences, that are located up-stream of the transcription start codon. A member of the TFII family, TFII-I is regulated by tyrosine phosphorylation, and it is involved in the initiation of transcription of TATA-less promoters and in cell type specific transcription. TFII-I directly associates with several promoters elements, including TATA box, pyrimidine-rich initiator (Inr) and E-box elements. TFII-I is also implicated in activating transcription of the transcription factor c-fos, a downstream effector protein in the MAP kinase-signaling pathway. TFII-I binds to several initiation sites within the c-fos promoter, and it is phosphorylated in response to Map kinase activation, which then enhances TFII-I induced expression of c-fos.

CHROMOSOMAL LOCATION

Genetic locus: GTF2I (human) mapping to 7q11.23; Gtf2i (mouse) mapping to 5 G2.

SOURCE

TFII-I (H-58) is a rabbit polyclonal antibody raised against amino acids 941-998 mapping at the C-terminus of TFII-I of human origin.

PRODUCT

Each vial contains 200 µg 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-28716 X, 200 µg/0.1 ml.

APPLICATIONS

TFII-I (H-58) is recommended for detection of short and long isoforms of TFII-I of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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).

TFII-I (H-58) is also recommended for detection of short and long isoforms of TFII-I in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for TFII-I siRNA (h): sc-36643, TFII-I siRNA (m): sc-36644, TFII-I shRNA Plasmid (h): sc-36643-SH, TFII-I shRNA Plasmid (m): sc-36644-SH, TFII-I shRNA (h) Lentiviral Particles: sc-36643-V and TFII-I shRNA (m) Lentiviral Particles: sc-36644-V.

TFII-I (H-58) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

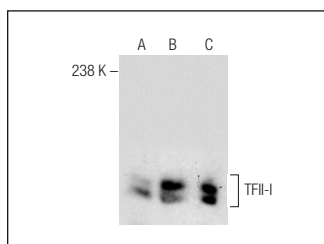
Molecular Weight of TFII-I isoforms: 120/128 kDa.

Positive Controls: HeLa nuclear extract: sc-2120, Jurkat nuclear extract: sc-2132 or NAMALWA cell lysate: sc-2234.

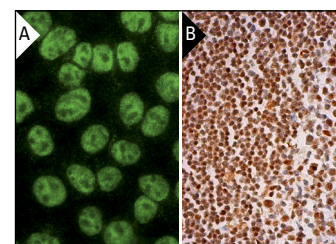
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



TFII-I (H-58): sc-28716. Western blot analysis of TFII-I expression in HeLa (A) and Jurkat (B) nuclear extracts and NAMALWA whole cell lysate (C).



TFII-I (H-58): sc-28716. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human lymph node tissue showing nuclear staining of cells in germinal centers and cells in non-germinal centers (B).

SELECT PRODUCT CITATIONS

- Vernimmen, D., et al. 2007. Long-range chromosomal interactions regulate the timing of the transition between poised and active gene expression. *EMBO J.* 26: 2041-2051.
- Qiao, H. and May, J.M. 2011. Regulation of the human ascorbate transporter SVCT2 exon 1b gene by zinc-finger transcription factors. *Free Radic. Biol. Med.* 50: 1196-1209.

STORAGE

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

RESEARCH USE

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



Try **TFII-I (B-7): sc-46670** or **TFII-I (8): sc-136330**, our highly recommended monoclonal alternatives to TFII-I (H-58).