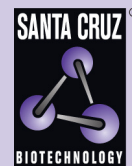


TFII-I (V-18): sc-9943



The Power to Question

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 upstream 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 (V-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near 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.

Blocking peptide available for competition studies, sc-9943 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-9943 X, 200 µg/0.1 ml.

APPLICATIONS

TFII-I (V-18) is recommended for detection of short and long forms 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 (V-18) is also recommended for detection of short and long forms 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.

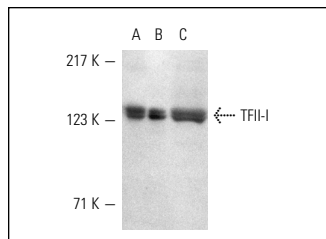
TFII-I (V-18) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

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

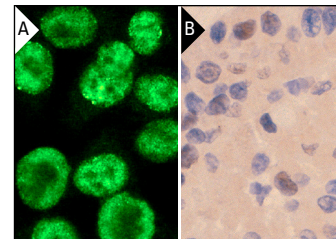
STORAGE

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

DATA



TFII-I (V-18): sc-9943. Western blot analysis of TFII-I expression in Jurkat (A) and HeLa (B) nuclear extracts and NALM6 (C) whole cell lysate.



TFII-I (V-18): sc-9943. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear staining (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human kidney tumor showing nuclear localization (B).

SELECT PRODUCT CITATIONS

- Abdelrahim, M., et al. 2005. Induction of endoplasmic reticulum (ER)-induced stress genes in Panc-1 pancreatic cancer cells is dependent on Sp proteins. *J. Biol. Chem.* 280: 16508-16513.
- Racek, T., et al. 2008. Transcriptional repression of the prosurvival endoplasmic reticulum chaperone GRP78/BIP by E2F1. *J. Biol. Chem.* 283: 34305-34314.
- Chimge, N.O., et al. 2008. Identification of the TFII-I family target genes in the vertebrate genome. *Proc. Natl. Acad. Sci. USA* 105: 9006-9010.
- Makeyev, A.V., et al. 2011. Molecular basis of Williams-Beuren syndrome: TFII-I regulated targets involved in craniofacial development. *Cleft Palate Craniofac. J.* 48: 109-116.
- Fan, A.X., et al. 2014. Genomic and proteomic analysis of transcription factor TFII-I reveals insight into the response to cellular stress. *Nucleic Acids Res.* 42: 7625-7641.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **TFII-I (B-7): sc-46670** or **TFII-I (8): sc-136330**, our highly recommended monoclonal alternatives to TFII-I (V-18).