

TFIID (TBP) (SI-1): sc-273

BACKGROUND

In eukaryotic systems, initiation of transcription from protein-coding genes is a complex process requiring RNA polymerase II and broad families of auxiliary transcription factors. Such factors can be divided into two major functional classes: the basal factors that are required for transcription of all Pol II genes, including TFIIA, TFIIB, TFIID, TFII E, TFIIF and TFIIFH; and sequence-specific factors that regulate gene expression. The basal transcription factors and Pol II form a specific multiprotein complex near the transcription start site by interacting with core promoter elements such as the TATA box generally located 25-30 base pairs upstream of the transcription start site. Binding of TFIID to the TATA element initiates assembly of the other factors into a pre-initiation complex. The TATA-binding subunit of TFIID (designated TFIIDt or TBP) from higher eukaryotes contains a highly conserved 180 amino acid C-terminal domain with all of the essential regions for DNA binding, transcription initiation and species specificity, and divergent N-terminal regions. The binding of TFIID to DNA is stimulated by direct interaction with TFIIA.

CHROMOSOMAL LOCATION

Genetic locus: TBP (human) mapping to 6q27; Tbp (mouse) mapping to 17 A2.

SOURCE

TFIID (TBP) (SI-1) is a rabbit polyclonal antibody raised against amino acids 1-300 representing full length TFIID (TBP) p36 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 agarose conjugate for immunoprecipitation, sc-273 AC, 500µg/0.25 ml agarose in 1 ml.

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-273 X, 200 µg/0.1 ml.

APPLICATIONS

TFIID (TBP) (SI-1) is recommended for detection of TFIID (TBP) p36 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

TFIID (TBP) (SI-1) is also recommended for detection of TFIID (TBP) p36 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for TFIID siRNA (h): sc-29503, TFIID siRNA (m): sc-36648, TFIID shRNA Plasmid (h): sc-29503-SH, TFIID shRNA Plasmid (m): sc-36648-SH, TFIID shRNA (h) Lentiviral Particles: sc-29503-V and TFIID shRNA (m) Lentiviral Particles: sc-36648-V.

TFIID (TBP) (SI-1) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

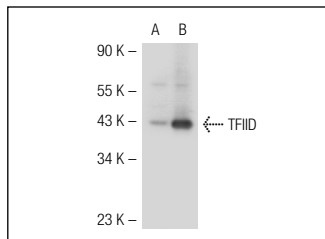
Molecular Weight of TFIID: 36 kDa.

Positive Controls: TFIID (h): 293T Lysate: sc-111938 or F9 cell lysate: sc-2245.

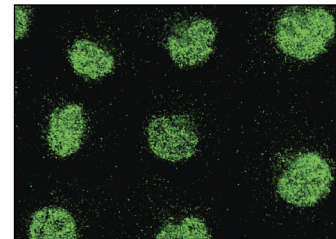
STORAGE

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

DATA



TFIID (TBP) (SI-1): sc-273. Western blot analysis of TFIID expression in non-transfected: sc-117752 (A) and human TFIID transfected: sc-111938 (B) 293T whole cell lysates.



TFIID (TBP) (SI-1): sc-273. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear localization.

SELECT PRODUCT CITATIONS

- Ogryzko, V.V., et al. 1998. Histone-like TAFs within the PCAF histone acetylase complex. *Cell* 94: 35-44.
- Jang, M.K., et al. 2009. Papillomavirus E2 proteins and the host Brd4 protein associate with transcriptionally active cellular chromatin. *J. Virol.* 83: 2592-2600.
- Seidel, K., et al. 2010. The promyelocytic leukemia zinc finger (PLZF) protein exerts neuroprotective effects in neuronal cells and is dysregulated in experimental stroke. *Brain Pathol.* 21: 31-43.
- Boeing, S., et al. 2010. RNA polymerase II C-terminal heptarepeat domain Ser-7 phosphorylation is established in a mediator-dependent fashion. *J. Biol. Chem.* 285: 188-196.
- Aoyagi, S. and Archer, T.K. 2011. Differential glucocorticoid receptor-mediated transcription mechanisms. *J. Biol. Chem.* 286: 4610-4619.
- Andorfer, P. and Rotheneder, H. 2011. EAPP: gatekeeper at the crossroad of apoptosis and p21-mediated cell-cycle arrest. *Oncogene* 30: 2679-2690.
- Antonaki, A., et al. 2011. Genomic analysis reveals a novel nuclear factor-κB (NF-κB)-binding site in Alu-repetitive elements. *J. Biol. Chem.* 286: 38768-38782.

RESEARCH USE

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



Try **TFIID (TBP) (58C9): sc-421** or **TFIID (1TB18): sc-56794**, our highly recommended monoclonal alternatives to TFIID (TBP) (SI-1). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **TFIID (TBP) (58C9): sc-421**.