

TAF II p18 (C-13): sc-15264

BACKGROUND

TFIID is a general transcription factor that facilitates the preinitiation complex assembly through direct interactions with the TATA promoter element. TFIID is a multisubunit complex consisting of a small TATA-binding polypeptide and other TBP-associated factors (TAFs). The TAF II family members include p18, p28, p32, p100, p130, p170 and p250, which is the largest subunit of TFIID. TAF II p32 is the human homologue of the *Drosophila* TAFII40 and is upregulated during apoptosis. TAFII p32 interacts with the activation domain of the viral protein 16, TFIIB and the class II transactivator (CIITA) to modulate transcription. The human and murine TAFII p32 proteins are distinct isoforms, designated TAF II p32 α and β , respectively, and they are thought to have individual roles in regulation. TAF II p28 and TAF II p18 interact with one another *in vitro* and intracellularly, and both interact with TBP through distinct domains. TAF II p28 potentiates transactivation of the estrogen and vitamin D3 receptors (ER and VDR), and is the limiting factor in the RXR α activation pathway.

REFERENCES

- Matsui, T., Segall, J., Well, P.A. and Roeder, R.G. 1980. Multiple factors required for accurate initiation of transcription by purified RNA polymerase II. *J. Biol. Chem.* 255: 11992-11996.
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- Dynlacht, B.D., Hoey, T. and Tjian, R. 1991. Isolation of coactivators associated with the TATA-binding protein that mediate transcriptional activation. *Cell* 66: 563-576.
- Takada, R., Nakatani, Y., Hoffmann, A., Kokubo, T., Hasegawa, S., Roeder, R.G. and Horikoshi, M. 1992. Identification of human TFIID components and direct interaction between a 250 kDa polypeptide and the TATA box-binding protein (TFIID). *Proc. Natl. Acad. Sci. USA* 89: 11809-11813.
- Klemm, R.D., Goodrich, J.A., Zhou, S. and Tjian, R. 1995. Molecular cloning and expression of the 32 kDa subunit of human TFIID reveals interactions with VP16 and TFIIB that mediate transcriptional activation. *Proc. Natl. Acad. Sci. USA* 92: 5788-5792.
- Mengus, G., May, M., Jacq, X., Staub, A., Tora, L., Chambon, P. and Davidson, I. 1995. Cloning and characterization of hTAFII18, hTAFII20 and hTAFII28: three subunits of the human transcription factor TFIID. *EMBO J.* 14: 1520-1531.

CHROMOSOMAL LOCATION

Genetic locus: TAF13 (human) mapping to 1p13.3; Taf13 (mouse) mapping to 3 F3.

SOURCE

TAF II p18 (C-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of TAF II p18 of human origin.

RESEARCH USE

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

PRODUCT

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

Blocking peptide available for competition studies, sc-15264 P, (100 μ g 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-15264 X, 200 μ g/0.1 ml.

APPLICATIONS

TAF II p18 (C-13) is recommended for detection of TAF II p18 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

TAF II p18 (C-13) is also recommended for detection of TAF II p18 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for TAF II p18 siRNA (h): sc-38492, TAF II p18 siRNA (m): sc-38493, TAF II p18 shRNA Plasmid (h): sc-38492-SH, TAF II p18 shRNA Plasmid (m): sc-38493-SH, TAF II p18 shRNA (h) Lentiviral Particles: sc-38492-V and TAF II p18 shRNA (m) Lentiviral Particles: sc-38493-V.

TAF II p18 (C-13) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of TAF II p18: 18 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

- Zaborowska, J., Taylor, A. and Murphy, S. 2012. A novel TBP-TAF complex on RNA polymerase II-transcribed snRNA genes. *Transcription* 3: 92-104.

STORAGE

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

PROTOCOLS

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