

TAF II p18 (304C2a): sc-81392

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. TAF II 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 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., et al. 1980. Multiple factors required for accurate initiation of transcription by purified RNA polymerase II. *J. Biol. Chem.* 255: 11992-11996.
- Buratowski, S., et al. 1989. Five intermediate complexes in transcription initiation by RNA polymerase II. *Cell* 56: 549-561.
- Dynlacht, B.D., et al. 1991. Isolation of coactivators associated with the TATA-binding protein that mediate transcriptional activation. *Cell* 66: 563-576.
- Takada, R., et al. 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., et al. 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., et al. 1995. Cloning and characterization of hTAF II p18, hTAF II p20 and hTAF II p28: three subunits of the human transcription factor TFIID. *EMBO J.* 14: 1520-1531.
- May, M., et al. 1996. Human TAF II p28 promotes transcriptional stimulation by activation function 2 of the retinoid X receptors. *EMBO J.* 15: 3093-3104.
- Fontes, J.D., et al. 1997. The class II trans-activator CIITA interacts with the TBP-associated factor TAF II p32. *Nucleic Acids Res.* 25: 2522-2528.

CHROMOSOMAL LOCATION

Genetic locus: TAF13 (human) mapping to 1p13.3.

SOURCE

TAF II p18 (304C2a) is a mouse monoclonal antibody raised against a recombinant protein corresponding to the C-terminal region of TAF II p18 of human origin.

PRODUCT

Each vial contains 100 μ g IgG_{2b} in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% BSA.

APPLICATIONS

TAF II p18 (304C2a) is recommended for detection of TAF II p18 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)].

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

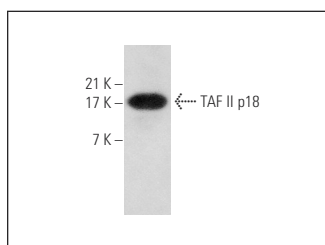
Molecular Weight of TAF II p18: 18 kDa.

Positive Controls: Jurkat nuclear extract: sc-2132.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-2031 (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).

DATA



TAF II p18 (304C2a): sc-81392. Western blot analysis of TAF II p18 expression in Jurkat nuclear extract.

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.

PROTOCOLS

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