

# TAF II p28 (H-158): sc-366112

## 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  $\alpha$  and  $\beta$ , 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 D<sub>3</sub> receptors (ER and VDR), and is the limiting factor in the RXR $\alpha$  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 hTAFII18, hTAFII20 and hTAFII28: three subunits of the human transcription factor TFIID. *EMBO J.* 14: 1520-1531.
- May, M., et al. 1996. Human TAF(II28) promotes transcriptional stimulation by activation function 2 of the retinoid X receptors. *EMBO J.* 15: 3093-3104.

## CHROMOSOMAL LOCATION

Genetic locus: TAF11 (human) mapping to 6p21.31; Taf11 (mouse) mapping to 17 A3.3.

## SOURCE

TAF II p28 (H-158) is a rabbit polyclonal antibody raised against amino acids 54-211 mapping at the C-terminus of TAF II p28 of human origin.

## PRODUCT

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

## APPLICATIONS

TAF II p28 (H-158) is recommended for detection of TAF II p28 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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).

TAF II p28 (H-158) is also recommended for detection of TAF II p28 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for TAF II p28 siRNA (h): sc-38494, TAF II p28 siRNA (m): sc-38495, TAF II p28 shRNA Plasmid (h): sc-38494-SH, TAF II p28 shRNA Plasmid (m): sc-38495-SH, TAF II p28 shRNA (h) Lentiviral Particles: sc-38494-V and TAF II p28 shRNA (m) Lentiviral Particles: sc-38495-V.

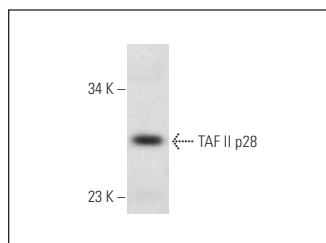
Molecular Weight of TAF II p28: 23 kDa.

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-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.

## DATA



TAF II p28 (H-158): sc-366112. Western blot analysis of TAF II p28 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.