SANTA CRUZ BIOTECHNOLOGY, INC.

TAF II p28 (A-4): sc-393100

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 D_3 receptors (ER and VDR), and is the limiting factor in the RXRa activation pathway.

REFERENCES

1. Matsui, T., et al. 1980. Multiple factors required for accurate initiation of transcription by purified RNA polymerase II. J. Biol. Chem. 255: 11992-11996.
2. Buratowski, S., et al. 1989. Five intermediate complexes in transcription initiation by RNA polymerase II. Cell 56: 549-561.
3. Dynlacht, B.D., et al. 1991. Isolation of coactivators associated with the TATA-binding protein that mediate transcriptional activation. Cell 66: 563-576.
4. 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.

CHROMOSOMAL LOCATION

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

SOURCE

TAF II p28 (A-4) is a mouse monoclonal antibody raised against amino acids 54-211 mapping at the C-terminus of TAF II p28 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

TAF II p28 (A-4) is available conjugated to agarose (sc-393100 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-393100 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393100 PE), fluorescein (sc-393100 FITC), Alexa Fluor® 488 (sc-393100 AF488), Alexa Fluor® 546 (sc-393100 AF546), Alexa Fluor® 594 (sc-393100 AF594) or Alexa Fluor® 647 (sc-393100 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-393100 AF680) or Alexa Fluor® 790 (sc-393100 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

TAF II p28 (A-4) is recommended for detection of TAF II p28 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

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.

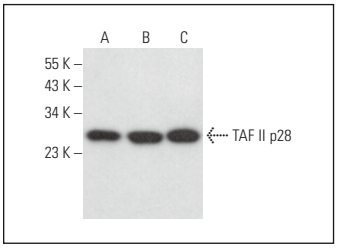
Molecular Weight of TAF II p28: 23 kDa.

Positive Controls: SK-N-MC nuclear extract: sc-2154, Hep G2 cell lysate: sc-2227 or HeLa nuclear extract: sc-2120.

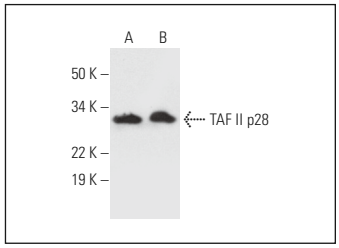
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



TAF II p28 (A-4): sc-393100. Western blot analysis of TAF II p28 expression in Hep G2 (**A**), Caki-1 (**B**) and WI-38 (**C**) whole cell lysates.



TAF II p28 (A-4): sc-393100. Western blot analysis of TAF II p28 expression in SK-N-MC (**A**) and HeLa (**B**) nuclear extracts.

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 for detailed protocols and support products.