SANTA CRUZ BIOTECHNOLOGY, INC.

TAF II p43 (B-7): sc-398062

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

TFIID is a general transcription factor that initiates preinitiation complex assembly through direct interaction with the TATA promoter element. Functioning as a multisubunit complex consisting of a small TATA-binding polypeptide and other TBP-associated factors (TAFs), TFIID mediates promoter responses to various transcriptional activators and repressors. TAF II p43, also known as TAF8, TAFII43 or TBN, is a 310 amino acid subunit of the TFIID complex that contains one histone-fold domain. Localized to either the nucleus or the cytoplasm depending on the developmental stage of the cell, TAF II p43 plays a role in fibroblast differentiation and is thought to be required for survival of the early embryo. Ectopic expression of the histone-fold domain results in a dominant-negative mutation that prevents TAF II p43 from regulating differentiation, an event that may be detrimental to developing cells. Four isoforms of TAF II p43 exist due to alternative splicing events.

REFERENCES

1. Pendergrast, P.S., et al. 1996. Mutations in the carboxy-terminal domain of TBP affect the synthesis of human immunodeficiency virus type 1 full-length and short transcripts similarly. J. Virol. 70: 5025-5034.
2. Purrello, M., et al. 1998. Genomics and transcription analysis of human TFIID. Oncogene 16: 1633-1638.
3. Guermah, M., et al. 2001. Positive and negative TAF_{II} functions that suggest a dynamic TFIID structure and elicit synergy with traps in activator-induced transcription. Mol. Cell. Biol. 21: 6882-6894.

CHROMOSOMAL LOCATION

Genetic locus: TAF8 (human) mapping to 6p21.1; Taf8 (mouse) mapping to 17 C.

SOURCE

TAF II p43 (B-7) is a mouse monoclonal antibody raised against amino acids 40-310 mapping at the C-terminus of TAF II p43 of human origin.

PRODUCT

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

TAF II p43 (B-7) is available conjugated to agarose (sc-398062 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-398062 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398062 PE), fluorescein (sc-398062 FITC), Alexa Fluor® 488 (sc-398062 AF488), Alexa Fluor® 546 (sc-398062 AF546), Alexa Fluor® 594 (sc-398062 AF594) or Alexa Fluor® 647 (sc-398062 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-398062 AF680) or Alexa Fluor® 790 (sc-398062 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

STORAGE

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

APPLICATIONS

TAF II p43 (B-7) is recommended for detection of TAF II p43 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), immunohistochemistry (including paraffin-embedded sections) (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 p43 siRNA (h): sc-95445, TAF II p43 siRNA (m): sc-154051, TAF II p43 shRNA Plasmid (h): sc-95445-SH, TAF II p43 shRNA Plasmid (m): sc-154051-SH, TAF II p43 shRNA (h) Lentiviral Particles: sc-95445-V and TAF II p43 shRNA (m) Lentiviral Particles: sc-154051-V.

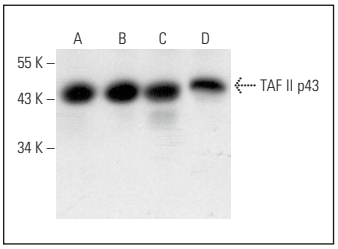
Molecular Weight of TAF II p43: 43 kDa.

Positive Controls: human heart extract: sc-363763, HeLa whole cell lysate: sc-2200 or NTERA-2 cl.D1 whole cell lysate: sc-364181.

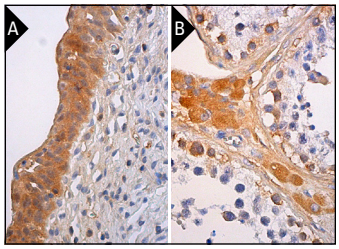
RECOMMENDED SUPPORT REAGENTS

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. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



TAF II p43 (B-7): sc-398062. Western blot analysis of TAF II p43 expression in NTERA-2 cl.D1 (**A**), HeLa (**B**) and 293 (**C**) whole cell lysates and human heart tissue extract (**D**).



TAF II p43 (B-7): sc-398062. Immunoperoxidase staining of formalin fixed, paraffin-embedded human urinary bladder tissue showing cytoplasmic staining of urothelial cells (**A**). Immunoperoxidase staining of formalin fixed, paraffin-embedded human testis tissue showing cytoplasmic staining of cells in seminiferous ducts and Leydig cells (**B**).

RESEARCH USE

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