**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 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.


**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 IgG2a 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.

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**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-IgG BP-HRP: sc-516102 or m-IgG 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-IgG BP-FITC: sc-516140 or m-IgG 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-IgG 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) is 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.