SANTA CRUZ BIOTECHNOLOGY, INC.

TAF II p43 (P-13): sc-109442

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., Morrison, D., Tansey, W.P. and Hernandez, N. 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., Di Pietro, C., Viola, A., Rapisarda, A., Stevens, S., Guermah, M., Tao, Y., Bonaiuto, C., Arcidiacono, A., Messina, A., Sichel, G., Grzeschik, K.H. and Roeder, R. 1998. Genomics and transcription analysis of human TFIID. Oncogene 16: 1633-1638.
3. Guermah, M., Tao, Y. and Roeder, R.G. 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.
4. Tora, L. 2002. A unified nomenclature for TATA box binding protein (TBP)-associated factors (TAFs) involved in RNA polymerase II transcription. Genes Dev. 16: 673-675.
5. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 609514. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
6. Guermah, M., Ge, K., Chiang, C.M. and Roeder, R.G. 2003. The TBN protein, which is essential for early embryonic mouse development, is an inducible TAFII implicated in adipogenesis. Mol. Cell 12: 991-1001.
7. Soutoglou, E., Demεny, M.A., Scheer, E., Fienga, G., Sassone-Corsi, P. and Tora, L. 2005. The nuclear import of TAF10 is regulated by one of its three histone fold domain-containing interaction partners. Mol. Cell. Biol. 25: 4092-4104.

CHROMOSOMAL LOCATION

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

SOURCE

TAF II p43 (P-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of TAF II p43 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-109442 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TAF II p43 (P-13) is recommended for detection of TAF II p43 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 p43 (P-13) is also recommended for detection of TAF II p43 in additional species, including equine, canine and bovine.

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.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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.