

TAF II p30 (Q-12): sc-109870

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 p30, also known as TAF2A, TAF2H or TAFII30, is a 218 amino acid subunit of TFIID. Localized to the nucleus, TAF II p30 plays a role in transcriptional activation and is thought to be necessary for both cell cycle progression and cellular differentiation. Human TAF II p30 can be monomethylated at Lys-189, an event that increases TAF II p30 affinity for RNA polymerase (POLR), thereby enhancing POLR-mediated transcription.

REFERENCES

- Chéhensse, V., Boulvin, C., Luce, S., Tora, L., Junien, C. and Henry, I. 1997. Assignment of the human TAFII30 gene (TAF2H) to human chromosome band 11p15.3 using somatic cell hybrids. *Cytogenet. Cell Genet.* 76: 41-42.
- Metzger, D., Scheer, E., Soldatov, A. and Tora, L. 1999. Mammalian TAFII30 is required for cell cycle progression and specific cellular differentiation programmes. *EMBO J.* 18: 4823-4834.
- Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 600475. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
- Liu, X., Tesfai, J., Evrard, Y.A., Dent, S.Y. and Martinez, E. 2003. c-Myc transformation domain recruits the human STAGA complex and requires TRRAP and GCN5 acetylase activity for transcription activation. *J. Biol. Chem.* 278: 20405-20412.
- 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.
- Kouskouti, A., Scheer, E., Staub, A., Tora, L. and Talianidis, I. 2004. Gene-specific modulation of TAF10 function by SET9-mediated methylation. *Mol. Cell* 14: 175-182.
- Soutoglou, E., Demény, 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.
- Couture, J.F., Collazo, E., Hauk, G. and Trievel, R.C. 2006. Structural basis for the methylation site specificity of SET7/9. *Nat. Struct. Mol. Biol.* 13: 140-146.

CHROMOSOMAL LOCATION

Genetic locus: TAF10 (human) mapping to 11p15.4; Taf10 (mouse) mapping to 7 E3.

SOURCE

TAF II p30 (Q-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of TAF II p30 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-109870 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TAF II p30 (Q-12) is recommended for detection of TAF II p30 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); non cross-reactive with other TAF II family members.

TAF II p30 (Q-12) is also recommended for detection of TAF II p30 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for TAF II p30 siRNA (h): sc-96590, TAF II p30 siRNA (m): sc-154050, TAF II p30 shRNA Plasmid (h): sc-96590-SH, TAF II p30 shRNA Plasmid (m): sc-154050-SH, TAF II p30 shRNA (h) Lentiviral Particles: sc-96590-V and TAF II p30 shRNA (m) Lentiviral Particles: sc-154050-V.

Molecular Weight of TAF II p30: 30 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204.

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.