SANTA CRUZ BIOTECHNOLOGY, INC.

TAF II p100 (6C1): sc-743

BACKGROUND

TFIID is a general transcription factor which initiates preinitiation complex assembly through direct interaction with the TATA promoter element. It is a multisubunit complex consisting of a small TATA-binding polypeptide and other TATA-binding protein (TBP)-associated factors (TAFs). Although native TFIID can mediate both activator-independent (basal) and activator-dependent transcription in reconstituted systems, TBP can mediate only basal transcription. TAF II p100 (TBP-associated factor II100), also known as TAF5 or TAFII100, is the third largest subunit of human TFIID. It contains six WD40 repeats at the C-terminus and has an N-terminus capable of forming a flexible dimer. TAF II p100 plays an important role in forming the scaffold that is crucial for the assembly of the TFIID complex. TAF II p100 may also be involved in the stabilization of TAF interactions.

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. Takada, R., et al. 1990. Identification of human TFIID components and direct interaction between a 250 kDa polypeptide and the TATA box-binding protein (TFIIDt). Proc. Natl. Acad. Sci. USA 89: 11809-11813.
4. Bellorini, M., et al. 1997. CCAAT binding NF-Y-TBP interactions: NF-YB and NF-YC require short domains adjacent to their histone fold motifs for association with TBP basic residues. Nucleic Acids Res. 25: 2174-2181.
5. Tao, Y., et al. 1997. Specific interactions and potential functions of human TAFII100. J. Biol. Chem. 272: 6714-6721.
6. Walker, A.K. and Blackwell, T.K. 2003. A broad but restricted requirement for TAF-5 (human TAFII100) for embryonic transcription in *Caenorhabditis elegans*. J. Biol. Chem. 278: 6181-6186.
7. Boyer-Guittaut, M., et al. 2005. SUMO-1 modification of human transcription factor (TF) IID complex subunits: inhibition of TFIID promoter-binding activity through SUMO-1 modification of hsTAF5. J. Biol. Chem. 280: 9937-9945.

CHROMOSOMAL LOCATION

Genetic locus: TAF5 (human) mapping to 10q24.33.

SOURCE

TAF II p100 (6C1) is a mouse monoclonal antibody produced by immunization with TAF II p100 isolated from HeLa cells.

PRODUCT

Each vial contains 200 µg IgG_1 in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-743 X, 200 µg/0.1 ml.

APPLICATIONS

TAF II p100 (6C1) is recommended for detection of TAF II p100 of human origin by immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)]; non cross-reactive with TAF II p100 of hamster or *Drosophila* origin.

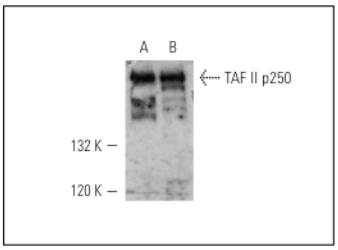
Suitable for use as control antibody for TAF II p100 siRNA (h): sc-38498, TAF II p100 shRNA Plasmid (h): sc-38498-SH and TAF II p100 shRNA (h) Lentiviral Particles: sc-38498-V.

TAF II p100 (6C1) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of TAF II p100: 100 kDa.

Positive Controls: A-431 (IP) cell lysate: sc-24781 or HeLa (IP) cell lysate: sc-24785.

DATA



Western blot analysis of TAF II complex in HeLa (**A**) and A-431 (**B**) nuclear extracts immunoprecipitated with TAF II p100 (6C1): sc-743 and detected with TAF II p250 (6B3): sc-735.

SELECT PRODUCT CITATIONS

1. Shao, Z., et al. 1997. Rb interacts with TAFII250/TFIID through multiple domains. Oncogene 15: 385-392.
2. Douglas, D.N., et al. 2001. A Role for Sp1 in the transcriptional regulation of hepatic triacylglycerol hydrolase in the mouse. J. Biol. Chem. 276: 25621-25630.
3. Raha, T., et al. 2005. HIV-1 Tat stimulates transcription complex assembly through recruitment of TBP in the absence of TAFs. PLoS Biol. 3: e44.
4. Castaño, E., et al. 2005. An easy approach for the purification of native TFIIH. J. Biochem. Biophys. Methods 62: 207-213.

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.