SANTA CRUZ BIOTECHNOLOGY, INC.

TAF II p100 (m): 293 Lysate: sc-179574

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., et al. 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.
8. Wright, K.J., et al. 2006. TAF4 nucleates a core subcomplex of TFIID and mediates activated transcription from a TATA-less promoter. Proc. Natl. Acad. Sci. USA 103: 12347-12352.
9. Bhattacharya, S., et al. 2007. Structural analysis and dimerization potential of the human TAF5 subunit of TFIID. Proc. Natl. Acad. Sci. USA 104: 1189-1194.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

CHROMOSOMAL LOCATION

Genetic locus: Taf5 (mouse) mapping to 19 C3.

PRODUCT

TAF II p100 (m): 293 Lysate represents a lysate of mouse TAF II p100 transfected 293 cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

TAF II p100 (m): 293 Lysate is suitable as a Western Blotting positive control for mouse reactive TAF II p100 antibodies. Recommended use: 10-20 µl per lane.

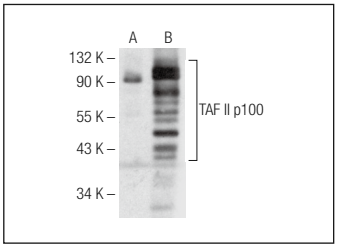
Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

TAF II p100 (E-9): sc-376932 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse TAF II p100 expression in TAF II p100 transfected 293 cells (starting dilution 1:100, dilution range 1:100-1:1,000).

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.

DATA



TAF II p100 (E-9): sc-376932. Western blot analysis of TAF II p100 expression in non-transfected: sc-110760 (**A**) and mouse TAF II p100 transfected: sc-179574 (**B**) 293 whole cell lysates.

RESEARCH USE

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