

TAF I p110 (h): 293T Lysate: sc-114680

BACKGROUND

For gene transcription governed by RNA polymerase I, the human transcription factor SL1 (mouse TIF-IB) directs the assembly of initiation complexes at the promoter. Like TFIID, which directs transcription by RNA polymerase II, SL1/TIF-IB contains the TATA-binding protein (TBP) and a set of TBP-associated factors (TAFs). The three TAF I subunits, hTAF I p110, hTAF I p63 and hTAF p48 (or mouse TAF I p95, TAF I p68 and TAF I p48), are all integral components of SL1/TIF-IB. The mutually exclusive binding of either TAF I or TAF II subunits to TBP is believed to direct the formation of promoter- and RNA polymerase-specific complexes.

REFERENCES

1. Learned, R.M., et al. 1985. Purification and characterization of a transcription factor that confers promoter specificity to human RNA polymerase I. *Mol. Cell. Biol.* 5: 1358-1369.
2. Clos, J., et al. 1986. A purified transcription factor (TIF-IB) binds to essential sequences of the mouse rDNA promoter. *Proc. Natl. Acad. Sci. USA* 83: 604-608.
3. Bell, S.P., et al. 1990. Assembly of alternative multiprotein complexes directs rRNA promoter selectivity. *Genes Dev.* 4: 943-954.
4. Comai, L., et al. 1992. The TATA-binding protein and associated factors are integral components of the RNA polymerase I transcription factor, SL1. *Cell* 68: 965-976.
5. Eberhard, D., et al. 1993. A TBP-containing multiprotein complex (TIF-IB) mediates transcription specificity of murine RNA polymerase I. *Nucleic Acids Res.* 21: 4180-4186.
6. Comai, L., et al. 1994. Reconstitution of transcription factor SL1: exclusive binding of TBP by SL1 or TFIID subunits. *Science* 266: 1966-1972.
7. Zomerdijk, J.C., et al. 1994. Assembly of transcriptionally active RNA polymerase I initiation factor SL1 from recombinant subunits. *Science* 266: 2015-2018.
8. Heix, J., et al. 1997. Cloning of murine RNA polymerase 1-specific TAF factors: conserved interactions between the subunits of the species-specific transcription initiation factor TIF-IB/SL1. *Proc. Natl. Acad. Sci. USA* 94: 1733-1738.

CHROMOSOMAL LOCATION

Genetic locus: TAF1C (human) mapping to 16q24.1.

PRODUCT

TAF I p110 (h): 293T Lysate represents a lysate of human TAF I p110 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

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.

APPLICATIONS

TAF I p110 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive TAF I p110 antibodies. Recommended use: 10-20 µl per lane.

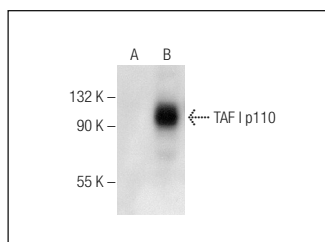
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

TAF I p110 (D-8): sc-376802 is recommended as a positive control antibody for Western Blot analysis of enhanced human TAF I p110 expression in TAF I p110 transfected 293T 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 I p110/p95 (D-8): sc-376802. Western blot analysis of TAF I p110 expression in non-transfected: sc-117752 (A) and human TAF I p110 transfected: sc-114680 (B) 293T whole cell lysates.

RESEARCH USE

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

PROTOCOLS

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