SANTA CRUZ BIOTECHNOLOGY, INC.

# TAF I p110 (C-10): sc-374551

SANTA CRUZ BIOTECHNOLOGY

*The Power to Question*

## 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 prompter. 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.


## CHROMOSOMAL LOCATION

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

## SOURCE

TAF I p110 (C-10) is a mouse monoclonal antibody raised against amino acids 570-869 mapping at the C-terminus of TAF I p110 of human origin.

## PRODUCT

Each vial contains 200 µg $IgG_1$ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-374551 X, 200 µg/0.1 ml.

TAF I p110 (C-10) is available conjugated to agarose (sc-374551 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-374551 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-374551 PE), fluorescein (sc-374551 FITC), Alexa Fluor® 488 (sc-374551 AF488), Alexa Fluor® 546 (sc-374551 AF546), Alexa Fluor® 594 (sc-374551 AF594) or Alexa Fluor® 647 (sc-374551 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-374551 AF680) or Alexa Fluor® 790 (sc-374551 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.



## STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## APPLICATIONS

TAF I p110 (C-10) is recommended for detection of TAF I p110 of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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).

Suitable for use as control antibody for TAF I p110 siRNA (h): sc-38490, TAF I p110 shRNA Plasmid (h): sc-38490-SH and TAF I p110 shRNA (h) Lentiviral Particles: sc-38490-V.

TAF I p110 (C-10) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

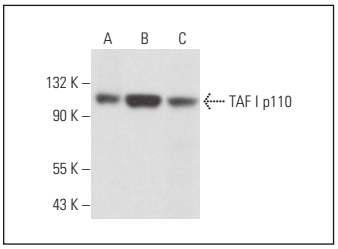
Molecular Weight of TAF I p110: 110 kDa.

Positive Controls: PC-3 nuclear extract: sc-2152, Jurkat whole cell lysate: sc-2204 or HT-1080 whole cell lysate: sc-364183.

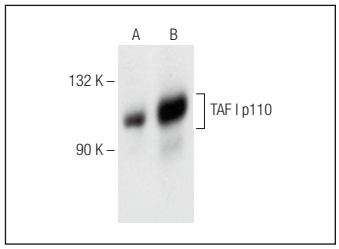
## RECOMMENDED SUPPORT REAGENTS

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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

## DATA




TAF I p110 (C-10): sc-374551. Western blot analysis of TAF I p110 expression in HT-1080 (**A**) and Jurkat (**B**) whole cell lysates and human tonsil tissue extract (**C**).




TAF I p110 (C-10): sc-374551. Western blot analysis of TAF I p110 expression in PC-3 nuclear extract (**A**) and HT-1080 whole cell lysate (**B**).

## SELECT PRODUCT CITATIONS


1. Chen, H.F., et al. 2023. TAF1B depletion leads to apoptotic cell death by inducing nucleolar stress and activating p53-miR-101 circuit in hepatocellular carcinoma. Front. Oncol. 13: 1203775.


## RESEARCH USE

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