# SANTA CRUZ BIOTECHNOLOGY, INC.

# TIP120A (B-8): sc-137124



#### BACKGROUND

TATA-binding protein (TBP) forms complexes with various nuclear proteins and is a target for various transcriptional regulators, such as TIP120. The two members of the TIP120 family of proteins, TIP120A and TIP120B, are TBP-Interacting Proteins that function as global activators in transcriptional regulation. TIP120A is a ubiqitously expressed protein isolated from rat liver nuclear extracts, originally named TIP120. TIP120B is a TIP120A-like protein that is expressed specifically in muscle tissues. TIP120A binds directly to TBP and a particular subunit of RNA polymerases (RNAP) to facilitate specific integration of RNAP II into the preinitiation complex (PIC). In addition to being a transcription factor of TBP, the chaperone-like activity toward the RNA polymerases demonstrates that TIP120 regulates the amplification of multiple gene expression.

# REFERENCES

- 1. Zawel, L., et al. 1992. Advances in RNA polymerase II transcription. Curr. Opin. Cell Biol. 4: 488-495.
- Conaway, R.C., et al. 1993. General initiation factors for RNA polymerase II. Annu. Rev. Biochem. 62: 161-190.
- 3. Yogosawa, S., et al. 1996. Molecular cloning of a novel 120-kDa TBPinteracting protein. Biochem. Biophys. Res. Commun. 229: 612-617.
- 4. Roeder, R.G. 1996. The role of general initiation factors in transcription by RNA polymerase II. Trends Biochem. Sci. 21: 327-335.
- 5. Aoki, T., et al. 1999. TIP120B: a novel TIP120-family protein that is expressed specifically in muscle tissues. Biochem. Biophys. Res. Commun. 261: 911-916.
- Makino, Y., et al. 1999. TATA-binding protein-interacting protein 120, TIP120, stimulates three classes of eukaryotic transcription via a unique mechanism. Mol. Cell. Biol. 19: 7951-7960.

#### CHROMOSOMAL LOCATION

Genetic locus: CAND1 (human) mapping to 12q14.3; Cand1 (mouse) mapping to 10 D2.

# SOURCE

TIP120A (B-8) is a mouse monoclonal antibody raised against amino acids 396-480 of TIP120A of human origin.

#### PRODUCT

Each vial contains 200  $\mu$ g lgG<sub>1</sub> 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-137124 X, 200  $\mu$ g/0.1 ml.

# **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.

## APPLICATIONS

TIP120A (B-8) is recommended for detection of TIP120A of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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 TIP120A siRNA (h): sc-37174, TIP120A siRNA (m): sc-37175, TIP120A shRNA Plasmid (h): sc-37174-SH, TIP120A shRNA Plasmid (m): sc-37175-SH, TIP120A shRNA (h) Lentiviral Particles: sc-37174-V and TIP120A shRNA (m) Lentiviral Particles: sc-37175-V.

TIP120A (B-8) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

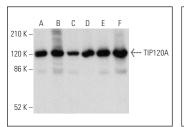
Molecular Weight of TIP120A: 120 kDa.

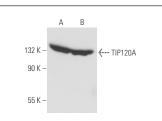
Positive Controls: RAW 264.7 whole cell lysate: sc-2211, HeLa nuclear extract: sc-2120 or Jurkat nuclear extract: sc-2132.

#### **RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG K BP-HRP: sc-516102 or m-lgG K 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-lgG K BP-FITC: sc-516140 or m-lgG K 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





TIP120A (B-8): sc-137124. Western blot analysis of TIP120A expression in MCF7 (A), Saos-2 (B), RAW 264.7 (C), NIH/3T3 (D) and H19-7/IGF-IR (E) whole cell lysates.

TIP120A (B-8): sc-137124. Western blot analysis of TIP120A expression in HeLa (**A**) and Jurkat (**B**) nuclear extracts.

#### **PROTOCOLS**

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