SANTA CRUZ BIOTECHNOLOGY, INC.

TIP120B (N-14): sc-99664



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 TIP-120A-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

- Zawel, L., et al. 1992. Advances in RNA polymerase II transcription. Curr. Opin. Cell Biol. 4: 488-495.
- 2. Conaway, R.C., et al. 1993. General initiation factors for RNA polymerase II. Annu. Rev. Biochem. 62: 161-190.
- Yogosawa, S., et al. 1996. Molecular cloning of a novel 120-kDa TBP-interacting 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.
- 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: CAND2 (human) mapping to 3p25.2; Cand2 (mouse) mapping to 6 E3.

SOURCE

TIP120B (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of TIP120B of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-99664 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, **D0 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

TIP120B (N-14) is recommended for detection of TIP120B of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ 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); non cross-reactive with other TIP family members.

TIP120B (N-14) is also recommended for detection of TIP120B in additional species, including equine.

Suitable for use as control antibody for TIP120B siRNA (h): sc-78223, TIP120B siRNA (m): sc-36682, TIP120B shRNA Plasmid (h): sc-78223-SH, TIP120B shRNA Plasmid (m): sc-36682-SH, TIP120B shRNA (h) Lentiviral Particles: sc-78223-V and TIP120B shRNA (m) Lentiviral Particles: sc-36682-V.

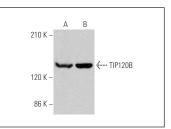
Molecular Weight of TIP120B: 151 kDa.

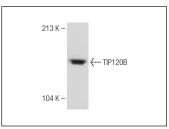
Positive Controls: Jurkat nuclear extract: sc-2132, C2C12 whole cell lysate: sc-364188 or HEK293 whole cell lysate: sc-45136.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker[™] Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

DATA





TIP120B (N-14): sc-99664. Western blot analysis of TIP120B expression in C2C12 (\pmb{A}) and HEK293 (\pmb{B}) whole cell lysates.

TIP120B (N-14): sc-99664. Western blot analysis of TIP120B expression in Jurkat nuclear extract.

PROTOCOLS

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