SANTA CRUZ BIOTECHNOLOGY, INC.

TIP120B (D-16): sc-10676

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The Power to Question

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

1. 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.
3. 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.
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.
6. 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 (mouse) mapping to 6 E3.

SOURCE

TIP120B (D-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of TIP120B of rat origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-10676 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-10676 X, 200 µg/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.

APPLICATIONS

TIP120B (D-16) is recommended for detection of TIP120B alternatively spliced form of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 TIP120B siRNA (m): sc-36682, TIP120B shRNA Plasmid (m): sc-36682-SH and TIP120B shRNA (m) Lentiviral Particles: sc-36682-V.

TIP120B (D-16) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of TIP120B: 151 kDa.

Positive Controls: rat skeletal muscle extract: sc-364810, mouse brain extract: sc-2253 or Sol8 cell lysate: sc-2249.

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) 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.

SELECT PRODUCT CITATIONS

1. Shen, Z., et al. 2013. Novel focal adhesion protein kindlin-2 promotes the invasion of gastric cancer cells through phosphorylation of integrin β1 and β3. J. Surg. Oncol. 108: 106-112.
2. Touaitahuata, H., et al. 2014. The mineral dissolution function of osteoclasts is dispensable for hypertrophic cartilage degradation during long bone development and growth. Dev. Biol. 14: 1-14.

RESEARCH USE

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

PROTOCOLS

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