SANTA CRUZ BIOTECHNOLOGY, INC.

TIP120A (YQ-07): sc-101180



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.
- Yogosawa, S., et al. 1996. Molecular cloning of a novel 120 kDa TBP-interacting protein. Biochem. Biophys. Res. Commun. 229: 612-617.
- 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.

SOURCE

TIP120A (YQ-07) is a mouse monoclonal antibody raised against recombinant TIP120A of human origin.

PRODUCT

Each vial contains 100 μg lgG_1 kappa light chain in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

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

APPLICATIONS

TIP120A (YQ-07) is recommended for detection of TIP120A of 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), immunohistochemistry (including paraffin-embedded sections) (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 shRNA Plasmid (h): sc-37174-SH and TIP120A shRNA (h) Lentiviral Particles: sc-37174-V.

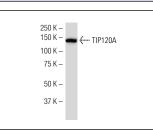
Molecular Weight of TIP120A: 120 kDa.

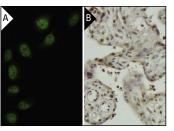
Positive Controls: Jurkat nuclear extract: sc-2132, HeLa nuclear extract: sc-2120 or HeLa whole cell lysate: sc-2200.

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, 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 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





TIP120A (YQ-07): sc-101180. Western blot analysis of TIP120A expression in HeLa nuclear extract. TIP120A (YQ-07): sc-101180. Immunofluorescence staining of paraformaldehyde-fixed HeLa cells showing nuclear localization (A) and immunoperoxidase staining of formalin-fixed, paraffin-embedded human placenta tissue showing nuclear and cytoplasmic localization (B).

RESEARCH USE

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