

TIP120A (D-9): sc-373718

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 ubiquitously 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.
- 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.
- 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 (D-9) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 2-21 at the N-terminus of TIP120A of rat origin.

PRODUCT

Each vial contains 200 µg IgM 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-373718 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-373718 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

RESEARCH USE

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

APPLICATIONS

TIP120A (D-9) 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 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).

TIP120A (D-9) is also recommended for detection of TIP120A in additional species, including equine, bovine and porcine.

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 (D-9) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

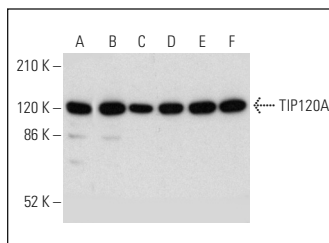
Molecular Weight of TIP120A: 120 kDa.

Positive Controls: PC-12 cell lysate: sc-2250, NIH/3T3 whole cell lysate: sc-2210 or Jurkat whole cell lysate: sc-2204.

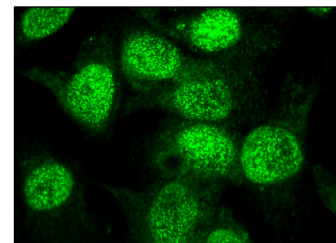
RECOMMENDED SUPPORT REAGENTS

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 L-Agarose: sc-2336 (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 (D-9): sc-373718. Western blot analysis of TIP120A expression in Jurkat (A), Saos-2 (B), RAW 264.7 (C), NIH/3T3 (D), H19-7/IGF-IR (E) and PC-12 (F) whole cell lysates.



TIP120A (D-9): sc-373718. Immunofluorescence staining of formalin-fixed Hep G2 cells showing nuclear localization.

STORAGE

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