

TIP120A (48): sc-136400

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 (48) is a mouse monoclonal antibody raised against amino acids 1-114 of TIP120A of rat origin.

PRODUCT

Each vial contains 200 µg IgG₁ 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-136400 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.

RESEARCH USE

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

APPLICATIONS

TIP120A (48) is recommended for detection of TIP120A of mouse, rat, human and canine origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

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 (48) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of TIP120A: 120 kDa.

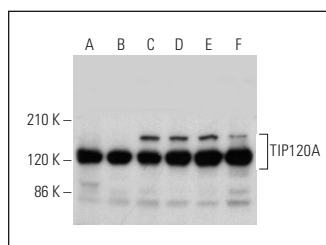
Positive Controls: Jurkat whole cell lysate: sc-2204, RAW 264.7 whole cell lysate: sc-2211 or HeLa whole cell lysate: sc-2200.

RECOMMENDED SUPPORT REAGENTS

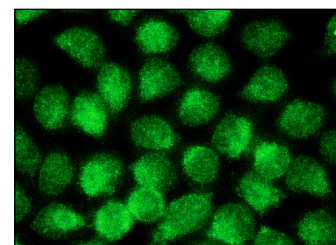
To ensure optimal results, the following support reagents are recommended:

- 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.
- Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).
- 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 (48): sc-136400. Western blot analysis of TIP120A expression in Jurkat (A), HeLa (B), RAW 264.7 (C), NIH/3T3 (D), H19-7/IGF-IR (E) and PC-12 (F) whole cell lysates.



TIP120A (48): sc-136400. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear localization.

SELECT PRODUCT CITATIONS

- Buanne, P., et al. 2013. Characterization of carbonic anhydrase IX interactome reveals proteins assisting its nuclear localization in hypoxic cells. *J. Proteome Res.* 12: 282-292.

PROTOCOLS

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