

# TIP120A (G-3): sc-137055



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 ubiquitously 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

- 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.

## CHROMOSOMAL LOCATION

Genetic locus: CAND1 (human) mapping to 12q14.3; Cand1 (mouse) mapping to 10 D2.

## SOURCE

TIP120A (G-3) is a mouse monoclonal antibody raised against amino acids 396-480 of TIP120A of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> 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-137055 X, 200 µg/0.1 ml.

TIP120A (G-3) is available conjugated to agarose (sc-137055 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-137055 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-137055 PE), fluorescein (sc-137055 FITC), Alexa Fluor® 488 (sc-137055 AF488), Alexa Fluor® 546 (sc-137055 AF546), Alexa Fluor® 594 (sc-137055 AF594) or Alexa Fluor® 647 (sc-137055 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-137055 AF680) or Alexa Fluor® 790 (sc-137055 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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## STORAGE

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

## APPLICATIONS

TIP120A (G-3) 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), 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).

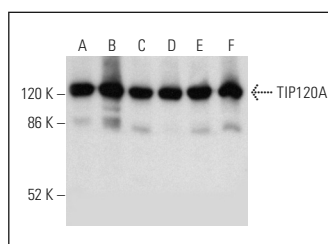
Suitable for use as control antibody for TIP120A siRNA (h): sc-37174, TIP120A siRNA (m): sc-37175, TIP120A shRNA Plasmid (h): sc-37174-SH, TIP120A shRNA Plasmid (m): sc-37175-SH, TIP120A shRNA (h) Lentiviral Particles: sc-37174-V and TIP120A shRNA (m) Lentiviral Particles: sc-37175-V.

TIP120A (G-3) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

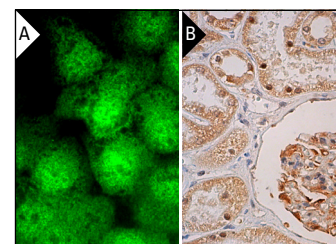
Molecular Weight of TIP120A: 120 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210, RAW 264.7 whole cell lysate: sc-2211 or PC-12 cell lysate: sc-2250.

## DATA



TIP120A (G-3): sc-137055. Western blot analysis of TIP120A expression in MCF7 (A), Saos-2 (B), RAW 264.7 (C), NIH/3T3 (D), H19-7/IGF-IR (E) and PC-12 (F) whole cell lysates.



TIP120A (G-3): sc-137055. Immunofluorescence staining of formalin-fixed A-431 cells showing cytoplasmic and nuclear localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human kidney tissue showing cytoplasmic and nuclear staining of cells in glomeruli and cells in tubules (B).

## SELECT PRODUCT CITATIONS

- Marx, B., et al. 2018. Phospholipidation of nuclear proteins by the human papillomavirus E6 oncoprotein: implication in carcinogenesis. *Oncotarget* 9: 34142-34158.
- Kajihio, H., et al. 2019. CAND1 regulates lunapark for the proper tubular network of the endoplasmic reticulum. *Sci. Rep.* 9: 13152.
- Mayor-Ruiz, C., et al. 2019. Plasticity of the cullin-RING ligase repertoire shapes sensitivity to ligand-induced protein degradation. *Mol. Cell* 75: 849-858.e8.
- Górska, A.A., et al. 2021. Muscle-specific Cand2 is translationally upregulated by mTORC1 and promotes adverse cardiac remodeling. *EMBO Rep.* E-published.

## RESEARCH USE

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