SANTA CRUZ BIOTECHNOLOGY, INC.

TIP120A (G-3): sc-137055

SANTA CRUZ BIOTECHNOLOGY

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 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.
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.

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_1 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.

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).

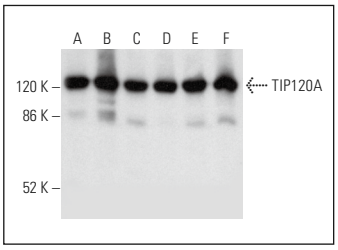
Suitable for use as control antibody for TIP120A siRNA (h): sc-37174, TIP120A siRNA (m): sc-37175, TIP120A shRNA Plasmid (h): sc-37174-SH, TIP120A shRNA Plasmid (m): sc-37175-SH, TIP120A shRNA (h) Lentiviral Particles: sc-37174-V and TIP120A shRNA (m) Lentiviral Particles: sc-37175-V.

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

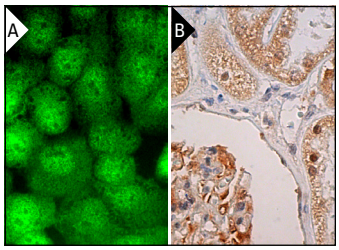
Molecular Weight of TIP120A: 120 kDa.

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

1. Marx, B., et al. 2018. Phospholipidation of nuclear proteins by the human papillomavirus E6 oncoprotein: implication in carcinogenesis. Oncotarget 9: 34142-34158.
2. Kajiho, H., et al. 2019. CAND1 regulates lunapark for the proper tubular network of the endoplasmic reticulum. Sci. Rep. 9: 13152.
3. 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.
4. Górska, A.A., et al. 2021. Muscle-specific Cand2 is translationally upregulated by mTORC1 and promotes adverse cardiac remodeling. EMBO Rep. 22: e52170.

RESEARCH USE

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