SANTA CRUZ BIOTECHNOLOGY, INC.

TIF1γ (H-106): sc-68424

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Transcriptional intermediary factor 1α (TIF1α) mediates transcriptional events by interactions with the AF2 region of several nuclear receptors, such as the estrogen, retinoic acid and vitamin D3 receptors. TIF1α localizes to nuclear bodies and is a member of the tripartite motif (TRIM) family. The TRIM motif includes three zinc-binding domains (RING, B-box type 1 and B-box type 2) and a coiled-coil region. TIF1β is also a member of the TRIM family that contains both a Cys/His PHD finger and bromodomain that form a cooperative unit required for transcriptional repression. TIF1β mediates transcriptional control by interaction with the kruppel-associated box (KRAB) repression domain found in many transcription factors and by binding DNA via its zinc finger. TIF1γ has a similar structure to the previous two TRIM members, though it presents several functional differences. TIF1γ interacts with the Smad2/3 transcription factor in hematopoietic, mesenchymal and epithelial cell types to mediate different transcriptional effects in response to TGFβ.

CHROMOSOMAL LOCATION

Genetic locus: TRIM33 (human) mapping to 1p13.2; Trim33 (mouse) mapping to 3 F2.2.

SOURCE

TIF1γ (H-106) is a rabbit polyclonal antibody raised against amino acids 571-676 mapping within an internal region of TIF1γ of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-68424 X, 200 µg/0.1 ml.

APPLICATIONS

TIF1γ (H-106) is recommended for detection of TIF1γ of mouse, rat and human 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)], 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).

TIF1γ (H-106) is also recommended for detection of TIF1γ in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for TIF1γ siRNA (h): sc-63127, TIF1γ siRNA (m): sc-63128, TIF1γ shRNA Plasmid (h): sc-63127-SH, TIF1γ shRNA Plasmid (m): sc-63128-SH, TIF1γ shRNA (h) Lentiviral Particles: sc-63127-V and TIF1γ shRNA (m) Lentiviral Particles: sc-63128-V.

TIF1γ (H-106) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

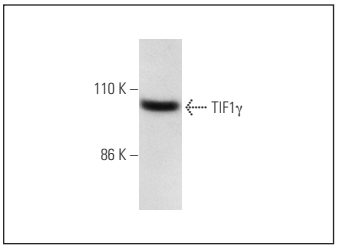
Molecular Weight of TIF1γ: 100 kDa.

Positive Controls: HeLa nuclear extract: sc-2120 or SW480 cell lysate: sc-2219.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), 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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



TIF1γ (H-106): sc-68424. Western blot analysis of TIF1γ expression in SW480 whole cell lysate.

SELECT PRODUCT CITATIONS

1. Ikeuchi, Y., et al. 2014. TIF1γ protein regulates epithelial-mesenchymal transition by operating as a small ubiquitin-like modifier (SUMO) E3 ligase for the transcriptional regulator SnoN1. J. Biol. Chem. 289: 25067-25078.

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.

PROTOCOLS

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