# SANTA CRUZ BIOTECHNOLOGY, INC.

# TIF1β (H-300): sc-33186



### BACKGROUND

TIF1 $\beta$  (transcriptional intermediary factor 1 $\beta$ ), also designated KAP1 (KRABassociated protein 1), TF1 $\beta$  and TRIM28 (tripartif motif-containing 28), is a member of the tripartif motif family characterized by three zinc-binding domains (RING, B-box type 1 and B-box type 2) and a coiled-coil domain. Like TIF1 $\alpha$ , TIF1 $\beta$  contains both a Cys/His PHD (plant homeodomain) finger and bromodomain that form a cooperative unit required for transcriptional repression. TIF1 $\beta$  mediates transcriptional control by interaction with the Krüppelassociated box (KRAB) repression domain found in many transcription factors and by binding DNA through its zinc finger. The human TIF1 $\beta$  gene maps to human chromosome 19q13.43 and encodes an 835 amino acid nuclear protein.

### CHROMOSOMAL LOCATION

Genetic locus: TRIM28 (human) mapping to 19q13.43; Trim28 (mouse) mapping to 7 A1.

## SOURCE

TIF1 $\beta$  (H-300) is a rabbit polyclonal antibody raised against amino acids 536-835 mapping at the C-terminus of TIF1 $\beta$  of human origin.

#### PRODUCT

Each vial contains 200  $\mu$ g lgG 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-33186 X, 200  $\mu$ g/0.1 ml.

### **APPLICATIONS**

TIF1 $\beta$  (H-300) is recommended for detection of TIF1 $\beta$  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), 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).

TIF1 $\beta$  (H-300) is also recommended for detection of TIF1 $\beta$  in additional species, including bovine.

Suitable for use as control antibody for TIF1 $\beta$  siRNA (h): sc-38550, TIF1 $\beta$  siRNA (m): sc-38551, TIF1 $\beta$  shRNA Plasmid (h): sc-38550-SH, TIF1 $\beta$  shRNA Plasmid (m): sc-38551-SH, TIF1 $\beta$  shRNA (h) Lentiviral Particles: sc-38550-V and TIF1 $\beta$  shRNA (m) Lentiviral Particles: sc-38551-V.

 $TIF1\beta$  (H-300) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of TIF1<sub>B</sub>: 100 kDa.

Positive Controls: CCRF-CEM nuclear extract: sc-2146, NIH/3T3 whole cell lysate: sc-2210 or TIF1 $\beta$  (h): 293T Lysate: sc-116358.

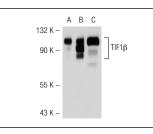
#### **STORAGE**

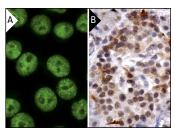
Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

### **RESEARCH USE**

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

#### DATA





TIF1 $\beta$  (H-300): sc-33186. Western blot analysis of TIF1 $\beta$  expression in non-transfected 293T: sc-117752 (**A**), human TIF1 $\beta$  transfected 293T: sc-116358 (**B**) and CCRF-CEM (**C**) whole cell lysates.

TIF1 $\beta$  (H-300): sc-33186. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear localization (**A**). Immunoperoxidase staining of formalin fixed, paraffin-embedded human pancreas tissue showing nuclear staining of Islets of Langerhans and glandular cells (**B**).

#### SELECT PRODUCT CITATIONS

- 1. Chen, Y.C., et al. 2010. The inhibitory effect of superparamagnetic iron oxide nanoparticle (Ferucarbotran) on osteogenic differentiation and its signaling mechanism in human mesenchymal stem cells. Toxicol. Appl. Pharmacol. 245: 272-279.
- 2. Cui, S., et al. 2011. Nuclear receptors TR2 and TR4 recruit multiple epigenetic transcriptional co-repressors that associate specifically with the embryonic  $\beta$ -type globin promoters in differentiated adult erythroid cells. Mol. Cell. Biol. 31: 3298-3311.
- Hu, C., et al. 2012. Roles of Krüppel-associated Box (KRAB)-associated Co-repressor KAP1 Ser-473 Phosphorylation in DNA Damage Response. J. Biol. Chem. 287: 18937-18952.

#### **PROTOCOLS**

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

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Try **TIF1β (23): sc-136102**, our highly recommended monoclonal alternative to TIF1β (H-300).