

TIF1 α (C-18): sc-15258

BACKGROUND

TIF1 α mediates transcriptional events by interactions with the AF2 region of several nuclear receptors, such as the estrogen, retinoic acid and vitamin D3 receptors. TIF1 α localizes to nuclear bodies and is thought to associate with chromatin and heterochromatin-associated factors. TIF1 α 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. The TIF1 α gene, which maps to human chromosome 7q34, encodes two alternatively spliced transcripts. However, the full length nature of one variant has not been determined. A TIF1 α homolog (designated bonus) has been identified in *Drosophila* and is associated with several genes that are implicated in the ecdysone pathway, a nuclear hormone receptor pathway required throughout *Drosophila* development, suggesting a conserved functional role for the protein throughout the course of evolution.

REFERENCES

- Fraser, R.A., Heard, D.J., Adam, S., Lavigne, A.C., Le Douarin, B., Tora, L., Losson, R., Rochette-Egly, C. and Chambon, P. 1998. The putative cofactor TIF1 α is a protein kinase that is hyperphosphorylated upon interaction with liganded nuclear receptors. *J. Biol. Chem.* 273: 16199-16204.
- Nielsen, A.L., Ortiz, J.A., You, J., Oulad-Abdelghani, M., Khechumian, R., Gansmuller, A., Chambon, P. and Losson, R. 1999. Interaction with members of the heterochromatin protein 1 (HP1) family and histone deacetylation are differentially involved in transcriptional silencing by members of the TIF1 family. *EMBO J.* 18: 6385-6395.
- Klugbauer, S. and Rabes, H.M. 1999. The transcription coactivator HTIF1 and a related protein are fused to the Ret receptor tyrosine kinase in childhood papillary thyroid carcinomas. *Oncogene* 18: 4388-4393.
- Beckstead, R., Ortiz, J.A., Sanchez, C., Prokopenko, S.N., Chambon, P., Losson, R. and Bellen, H.J. 2001. Bonus, a *Drosophila* homolog of TIF1 proteins, interacts with nuclear receptors and can inhibit β FTZ-F1-dependent transcription. *Mol. Cell.* 7: 753-765.
- LocusLink Report (LocusID: 8805). <http://www.ncbi.nlm.nih.gov/LocusLink/>

CHROMOSOMAL LOCATION

Genetic locus: TRIM24 (human) mapping to 7q33.

SOURCE

TIF1 α (C-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of TIF1 α of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-15258 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-15258 X, 200 μ g/0.1 ml.

APPLICATIONS

TIF1 α (C-18) is recommended for detection of TIF1 α of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

Suitable for use as control antibody for TIF1 α siRNA (h): sc-38548, TIF1 α shRNA Plasmid (h): sc-38548-SH and TIF1 α shRNA (h) Lentiviral Particles: sc-38548-V.

TIF1 α (C-18) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

SELECT PRODUCT CITATIONS

- Yondola, M. and Hearing, P. 2007. The adenovirus E4 ORF3 protein binds and reorganizes the TRIM family member transcriptional intermediary factor 1 α . *J. Virol.* 81: 4264-4271.

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.


 MONOS
 Satisfaction
 Guaranteed

Try **TIF1 α (C-4): sc-271266**, our highly recommended monoclonal alternative to TIF1 α (C-18).