

# TTF2 (C-19): sc-54429

## BACKGROUND

TTF2 (transcription termination factor 2), also known as HuF2, is a dsDNA (double-stranded DNA)-dependent ATPase that functions as a transcription termination factor. Localized to the cytoplasm during interphase and to the nucleus once the cell enters mitosis, TTF2 couples ATP hydrolysis with the removal of RNA polymerase II (Pol II) from the DNA template, thereby terminating transcription. TTF2 is a member of the Swi2/Snf2 protein family and, in addition to its ability to terminate transcription, is thought to play a role in pre-mRNA splicing and mitotic transcriptional repression. TTF2 contains one helicase ATP-binding domain and is thought to interact with both the spliceosome complex and with Cdc5L (cell division cycle 5-like). Two isoforms of TTF2 exist due to alternative splicing events.

## REFERENCES

- Liu, M., Xie, Z. and Price, D.H. 1998. A human RNA polymerase II transcription termination factor is a Swi2/Snf2 family member. *J. Biol. Chem.* 273: 25541-25544.
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- Leonard, D., Ajuh, P., Lamond, A.I. and Legerski, R.J. 2003. hLodestar/HuF2 interacts with Cdc5L and is involved in pre-mRNA splicing. *Biochem. Biophys. Res. Commun.* 308: 793-801.
- Jiang, Y. and Price, D.H. 2004. Rescue of the TTF2 knockdown phenotype with an siRNA-resistant replacement vector. *Cell Cycle* 3: 1151-1153.
- Jiang, Y., Liu, M., Spencer, C.A. and Price, D.H. 2004. Involvement of transcription termination factor 2 in mitotic repression of transcription elongation. *Mol. Cell* 14: 375-385.
- Yu, L.R., Zhu, Z., Chan, K.C., Issaq, H.J., Dimitrov, D.S. and Veenstra, T.D. 2007. Improved titanium dioxide enrichment of phosphopeptides from HeLa cells and high confident phosphopeptide identification by cross-validation of MS/MS and MS/MS/MS spectra. *J. Proteome Res.* 6: 4150-4162.

## CHROMOSOMAL LOCATION

Genetic locus: TTF2 (human) mapping to 1p13.1; Ttf2 (mouse) mapping to 3 F2.2.

## SOURCE

TTF2 (C-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of TTF2 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.

Blocking peptide available for competition studies, sc-54429 P, (100 µg 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-54429 X, 200 µg/0.1 ml.

## APPLICATIONS

TTF2 (C-19) is recommended for detection of TTF2 isoform 1 of mouse, rat and 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).

TTF2 (C-19) is also recommended for detection of TTF2 isoform 1 in additional species, including equine and porcine.

Suitable for use as control antibody for TTF2 siRNA (h): sc-106890, TTF2 siRNA (m): sc-77415, TTF2 shRNA Plasmid (h): sc-106890-SH, TTF2 shRNA Plasmid (m): sc-77415-SH, TTF2 shRNA (h) Lentiviral Particles: sc-106890-V and TTF2 shRNA (m) Lentiviral Particles: sc-77415-V.

TTF2 (C-19) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of TTF2: 130 kDa.

Positive Controls: F9 cell lysate: sc-2245, NIH/3T3 whole cell lysate: sc-2210 or Daudi cell lysate: sc-2415.

## 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.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.