

TTF2 (A-9): sc-393478

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., et al. 1998. A human RNA polymerase II transcription termination factor is a SWI2/SNF2 family member. *J. Biol. Chem.* 273: 25541-25544.
- Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 604718. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
- Leonard, D., et al. 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., et al. 2004. Involvement of transcription termination factor 2 in mitotic repression of transcription elongation. *Mol. Cell* 14: 375-385.

CHROMOSOMAL LOCATION

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

SOURCE

TTF2 (A-9) is a mouse monoclonal antibody raised against amino acids 24-173 mapping near the N-terminus of TTF2 of mouse origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

TTF2 (A-9) is available conjugated to agarose (sc-393478 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-393478 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393478 PE), fluorescein (sc-393478 FITC), Alexa Fluor[®] 488 (sc-393478 AF488), Alexa Fluor[®] 546 (sc-393478 AF546), Alexa Fluor[®] 594 (sc-393478 AF594) or Alexa Fluor[®] 647 (sc-393478 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-393478 AF680) or Alexa Fluor[®] 790 (sc-393478 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

RESEARCH USE

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

APPLICATIONS

TTF2 (A-9) is recommended for detection of TTF2 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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.

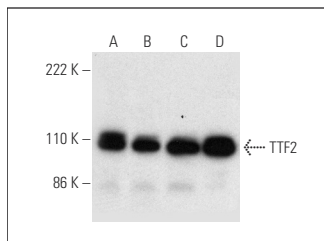
Molecular Weight of TTF2: 130 kDa.

Positive Controls: F9 cell lysate: sc-2245, TK-1 whole cell lysate: sc-364798 or AMJ2-C8 whole cell lysate: sc-364366.

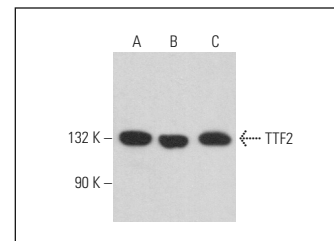
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

DATA



TTF2 (M-150): sc-393478. Western blot analysis of TTF2 expression in F9 (A), c4 (B), TK-1 (C) and AMJ2-C8 (D) whole cell lysates.



TTF2 (A-9): sc-393478. Western blot analysis of TTF2 expression in HeLa (A), Daudi (B) and RAW 264.7 (C) whole cell lysates.

STORAGE

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

PROTOCOLS

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

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