

TIS11B (A-21): sc-134091

BACKGROUND

TIS11B (tetradecanoyl phorbol acetate-inducible-sequence 11b), also known as ZFP36L1, BRF1 (butyrate response factor 1), ERF1 (EGF-response factor 1), cMG1, Berg36 or RNF162B, is a member of the tristetraprolin family. Tristetraprolin (TTP), or TIS11, is a zinc-binding protein encoded by the immediate-early response gene, Zfp-36. TIS11B, a relative of TTP, localizes to the nucleus and may function as a transcription factor involved in regulating the growth factor response. It is an evolutionarily conserved protein containing two C3H1-type zinc fingers and a repeating cys-his motif. TIS11B is an mRNA binding protein and is known to interact with the 3'-untranslated region of VEGF mRNA, thereby decreasing its stability. This suggests that TIS11B is a potential target in antiangiogenic therapy. In addition, TIS11B may also be an important regulator of myogenesis, as its expression is upregulated during murine myoblast differentiation.

REFERENCES

1. Taylor, G.A., et al. 1991. The human TTP protein: sequence, alignment with related proteins, and chromosomal localization of the mouse and human genes. *Nucleic Acids Res.* 19: 3454.
2. Kaneda, N., et al. 1992. Sequence of a rat TIS11 cDNA, an immediate early gene induced by growth factors and phorbol esters. *Gene* 118: 289-291.
3. Johnson, B.A., et al. 2000. Similar but distinct effects of the tristetraprolin/TIS11 immediate-early proteins on cell survival. *Oncogene* 19: 1657-1664.
4. Johnson, B.A., et al. 2002. Multiple tristetraprolin sequence domains required to induce apoptosis and modulate responses to TNF α through distinct pathways. *Oncogene* 21: 4237-4246.
5. Online Mendelian Inheritance in Man, OMIM[™]. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 601064. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
6. Ciaia, D., et al. 2004. Destabilization of vascular endothelial growth factor mRNA by the zinc-finger protein TIS11B. *Oncogene* 23: 8673-8680.

CHROMOSOMAL LOCATION

Genetic locus: ZFP36L1 (human) mapping to 14q24.1; Zfp36l1 (mouse) mapping to 12 C3.

SOURCE

TIS11B (A-21) is an affinity purified rabbit polyclonal antibody raised against an N-terminal region of synthetic TIS11B peptide of human origin.

PRODUCT

Each vial contains 50 μ g IgG in 0.5 ml of PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

STORAGE

Store at 4 $^{\circ}$ C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

TIS11B (A-21) is recommended for detection of TIS11B of mouse, rat, human and canine origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

TIS11B (A-21) is also recommended for detection of TIS11B in additional species, including bovine and canine.

Suitable for use as control antibody for TIS11B siRNA (h): sc-76672, TIS11B siRNA (m): sc-76673, TIS11B shRNA Plasmid (h): sc-76672-SH, TIS11B shRNA Plasmid (m): sc-76673-SH, TIS11B shRNA (h) Lentiviral Particles: sc-76672-V and TIS11B shRNA (m) Lentiviral Particles: sc-76673-V.

Molecular Weight (predicted) of TIS11B: 36 kDa.

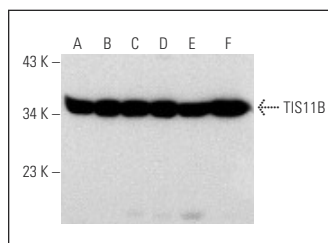
Molecular Weight (observed) of TIS11B: 32/36 kDa.

Positive Controls: K-562 nuclear extract: sc-2130, HeLa nuclear extract: sc-2120 or JAR cell lysate: sc-2276.

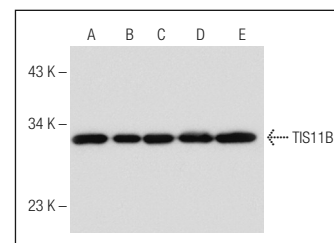
RECOMMENDED SECONDARY REAGENTS

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).

DATA



TIS11B (A-21): sc-134091. Western blot analysis of TIS11B expression in HeLa (A), K-562 (B), THP-1 (C), A549 (D), KNRK (E) and WI-38 (F) nuclear extracts.



TIS11B (A-21): sc-134091. Western blot analysis of TIS11B expression in JAR (A), Ramos (B), A549 (C), MCR7 (D) and SW480 (E) whole cell lysates.

RESEARCH USE

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

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Try **TIS11B (1A3): sc-293267**, our highly recommended monoclonal alternative to TIS11B (A-21).