

TSC-36 (C-16): sc-17129

BACKGROUND

TSC-36 (also known as TGF- β 1-stimulated clone 36, or FRP (follistatin-related protein 1) is a secreted extracellular glycoprotein. The amino acid sequence of TSC-36 is similar to follistatin, an inhibitor of activin, as it contains a follistatin module. TSC-36 is a heparin-binding protein suggested to have a role in the negative regulation of cellular growth, as its expression is induced in response to TGF- β 1. In addition, TSC-36 is not found in small cell lung cancer (SCLC) cells, a highly aggressive neoplasm, but is detected in some non-small cell lung cancer (NSCLC) cells, a moderately aggressive neoplasm.

REFERENCES

- Shibanuma, M., Mashimo, J., Mita, A., Kuroki, T. and Nose, K. 1993. Cloning from a mouse osteoblastic cell line of a set of transforming growth factor β 1-regulated genes, one of which seems to encode a follistatin-related polypeptide. *Eur. J. Biochem.* 217: 13-19.
- Zwijsen, A., Blockx, H., Van Arnhem, W., Willems, J., Franssen, L., Devos, K., Raymackers, J., Van de Voorde, A. and Slegers, H. 1994. Characterization of a rat C6 glioma-secreted follistatin-related protein (FRP). Cloning and sequence of the human homologue. *Eur. J. Biochem.* 225: 937-946.
- Mashimo, J., Maniwa, R., Sugino, H. and Nose, K. 1997. Decrease in the expression of a novel TGF β 1-inducible and ras-recision gene, TSC-36, in human cancer cells. *Cancer Lett.* 113: 213-219.
- Tanaka, M., Ozaki, S., Osakada, F., Mori, K., Okubo, M. and Nakao, K. 1998. Cloning of follistatin-related protein as a novel autoantigen in systemic rheumatic diseases. *Int. Immunol.* 10: 1305-1314.
- Okabayashi, K., Shoji, H., Onuma, Y., Nakamura, T., Nose, K., Sugino, H. and Asashima, M. 1999. cDNA cloning and distribution of the *Xenopus* follistatin-related protein. *Biochem. Biophys. Res. Commun.* 254: 42-48.

CHROMOSOMAL LOCATION

Genetic locus: FSTL1 (human) mapping to 3q13.33; Fstl1 (mouse) mapping to 16 B3.

SOURCE

TSC-36 (C-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of TSC-36 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-17129 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

TSC-36 (C-16) is recommended for detection of TSC-36 of mouse, rat and human 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)], 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).

TSC-36 (C-16) is also recommended for detection of TSC-36 in additional species, including equine, canine and bovine.

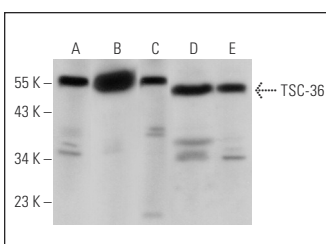
Suitable for use as control antibody for TSC-36 siRNA (h): sc-39815, TSC-36 siRNA (m): sc-39816, TSC-36 shRNA Plasmid (h): sc-39815-SH, TSC-36 shRNA Plasmid (m): sc-39816-SH, TSC-36 shRNA (h) Lentiviral Particles: sc-39815-V and TSC-36 shRNA (m) Lentiviral Particles: sc-39816-V.

Positive Controls: mouse brain extract: sc-2253, JEG-3 whole cell lysate: sc-364255 or MIA PaCa-2 cell lysate: sc-2285.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



TSC-36 (C-16): sc-17129. Western blot analysis of TSC-36 expression in mouse pancreas (A) and mouse brain (B) tissue extracts and JEG-3 (C), HUV-EC-C (D) and MIA PaCa-2 (E) whole cell lysates.

RESEARCH USE

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

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Try **TSC-36 (JJ7): sc-80408**, our highly recommended monoclonal alternative to TSC-36 (C-16).