

# TSC-36 (JJ7): sc-80408

## BACKGROUND

TSC-36, also known as TGF- $\beta$ 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- $\beta$ 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

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- 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.
- Sumitomo, K., Kurisaki, A., Yamakawa, N., Tsuchida, K., Shimizu, E., Sone, S. and Sugino, H. 2000. Expression of a TGF- $\beta$ 1 inducible gene, TSC-36, causes growth inhibition in human lung cancer cell lines. *Cancer Lett.* 155: 37-46.

## CHROMOSOMAL LOCATION

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

## SOURCE

TSC-36 (JJ7) is a rat monoclonal antibody raised against full length recombinant TSC-36 of human origin.

## PRODUCT

Each vial contains 100  $\mu$ g IgG<sub>2b</sub> in 1.0 ml of PBS with < 0.1% sodium azide and protein stabilizer.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.

## APPLICATIONS

TSC-36 (JJ7) 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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.

## SELECT PRODUCT CITATIONS

- Shang, H., Liu, X. and Guo, H. 2017. Knockdown of Fstl1 attenuates hepatic stellate cell activation through the TGF- $\beta$ 1/Smad3 signaling pathway. *Mol. Med. Rep.* 16: 7119-7123.

## STORAGE

For immediate and continuous use, store at 4° C for up to one month. For sporadic use, freeze in working aliquots in order to avoid repeated freeze/thaw cycles. If turbidity is evident upon prolonged storage, clarify solution by centrifugation.

## RESEARCH USE

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