LTBP-4 (H-293): sc-33144



The Power to Question

BACKGROUND

LTBP-4 (latent TGF β -binding protein 4) is a structural component of connective tissue microfibrils which acts as a local regulator of TGF β tissue deposition and signaling. LTBP-4 exists in at least four different forms, due to alternative splicing at the amino-terminus and at the central epidermal growth factor repeat domain. LTBP-4 mRNA is present in heart, aorta, uterus and small intestine. The gene encoding human LTBP-4 localizes to chromosomal position 19q13.2.

REFERENCES

- 1. Giltay, R., et al. 1997. Sequence and expression of a novel member (LTBP-4) of the family of latent transforming growth factor β binding proteins. FEBS Lett. 411: 164-168.
- 2. Saharinen, J., et al. 1998. Identification and characterization of a new latent transforming growth factor β -binding protein, LTBP-4. J. Biol. Chem. 273: 18459-18469.
- 3. Koli, K., et al. 2001. Novel non-TGF β -binding splice variant of LTBP-4 in human cells and tissues provides means to decrease TGF β deposition. J. Cell Sci. 114: 2869-2878.
- 4. Mangasser-Stephan, K., et al. 2001. Expression of isoforms and splice variants of the latent transforming growth factor β binding protein (LTBP) in cultured human liver myofibroblasts. Liver 21: 105-113.

CHROMOSOMAL LOCATION

Genetic locus: LTBP4 (human) mapping to 19q13.2; Ltbp4 (mouse) mapping to 7 A3.

SOURCE

LTBP-4 (H-293) is a rabbit polyclonal antibody raised against amino acids 33-300 mapping near the N-terminus of LTBP-4 of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

LTBP-4 (H-293) is recommended for detection of the long and short forms of LTBP-4 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), immunohistochemistry (including paraffinembedded sections) (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 LTBP-4 siRNA (h): sc-45861, LTBP-4 siRNA (m): sc-45862, LTBP-4 shRNA Plasmid (h): sc-45861-SH, LTBP-4 shRNA Plasmid (m): sc-45862-SH, LTBP-4 shRNA (h) Lentiviral Particles: sc-45861-V and LTBP-4 shRNA (m) Lentiviral Particles: sc-45862-V.

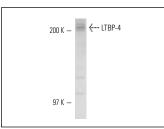
Molecular Weight of LTBP-4: 200-300 kDa.

Positive Controls: A549 cell lysate: sc-2413 or WI 38 whole cell lysate.

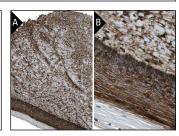
RECOMMENDED SECONDARY REAGENTS

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). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



LTBP-4 (H-293): sc-33144. Western blot analysis of LTBP-4 expression in WI 38 whole cell lysate.



LTBP-4 (H-293): sc-33144. Immunoperoxidase staining of formalin fixed, paraffin-embedded human cervix, uterine tissue showing cytoplasmic and membrane staining of surface epithelial cells and glandular cells at low (A) and high (B) magnification. Kindly provided by The Swedish Human Protein Atlas (HPA) program.

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 or our catalog for detailed protocols and support products.



Try **LTBP-4 (A-2)**: **sc-393666**, our highly recommended monoclonal alternative to LTBP-4 (H-293).

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3801 Fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com