

LTBP-4 (C-14): sc-30359

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.
5. Penttinen, C., et al. 2002. Secretion of human latent TGF β -binding protein-3 (LTBP-3) is dependent on co-expression of TGF β . *J. Cell Sci.* 115: 3457-3468.

CHROMOSOMAL LOCATION

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

SOURCE

LTBP-4 (C-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of LTBP-4 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-30359 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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 or our catalog for detailed protocols and support products.

APPLICATIONS

LTBP-4 (C-14) 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

LTBP-4 (C-14) is also recommended for detection of the long and short forms of LTBP-4 in additional species, including canine.

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.

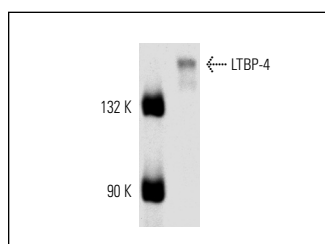
Molecular Weight of LTBP-4: 200-300 kDa.

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 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



LTBP-4 (C-14): sc-30359. Western blot analysis of LTBP-4 expression in A549 whole cell lysate.

RESEARCH USE

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

MONOS
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Try **LTBP-4 (A-2): sc-393666**, our highly recommended monoclonal alternative to LTBP-4 (C-14).