SANTA CRUZ BIOTECHNOLOGY, INC.

# LTBP-2 (H-270): sc-48759

SANTA CRUZ BIOTECHNOLOGY

*The Power to Question*

## BACKGROUND

Transforming growth factor (TGF)-β is secreted as a part of an inactive complex that frequently contains latent TGF-β-binding protein (LTBP). The LTBP family of proteins exhibit a multidomain structure containing cysteine-rich motifs. LTBP-2 is an integral component of elastin-containing microfibrils and contains 20 EGF-like repeats and four copies of an 8-cysteine repeat. LTBP-2 is synthesized as a protein by human foreskin fibroblasts. LTBP-2 co-localizes with tropoelastin in several tissues, including lung, dermis, epicardium, pericardium and heart valves throughout rodent development, and in the spleen in the young adult mouse. Pseudoexfoliation (PEX) syndrome is a systemic condition characterized by the pathologic production and accumulation of an abnormal fibrillar extracellular material in many intra- and extraocular tissues. The co-localization of LTBP-1 and LTBP-2 with latent TGF-β1 and with fibrillin-1 on PEX fibrils suggests a possible mechanism for the regulation of TGF-β1 activity in PEX eyes. The LTBP-2 gene maps to human chromosome 14q24.3.

## REFERENCES


1. Moren, A., et al. 1994. Identification and characterization of LTBP-2, a novel latent transforming growth factor-β-binding protein J. Biol. Chem. 269: 32469-32478.
2. Bashir, M.M., et al. 1996. Analysis of the human gene encoding latent transforming growth factor-β-binding protein-2. Int. J. Biochem. Cell Biol. 28: 531-542.
3. Shipley, J.M., et al. 2000. Developmental expression of latent transforming growth factor β binding protein 2 and its requirement early in mouse development. Mol. Cell. Biol. 20: 4879-4887.
4. Schlotzer-Schrehardt, U., et al. 2001. Role of transforming growth factor-β1 and its latent form binding protein in pseudoexfoliation syndrome. Exp. Eye Res. 73: 765-780.
5. Sinha, S., et al. 2002. Expression of latent TGF-β binding proteins and association with TGF-β1 and fibrillin-1 following arterial injury. Cardiovasc. Res. 53: 971-983.


## CHROMOSOMAL LOCATION

Genetic locus: LTBP2 (human) mapping to 14q24.3; Ltbp2 (mouse) mapping to 12 D1.

## SOURCE

LTBP-2 (H-270) is a rabbit polyclonal antibody raised against amino acids 211-480 mapping within an internal region of LTBP-2 of human origin.

## PRODUCT

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

## STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## APPLICATIONS

LTBP-2 (H-270) is recommended for detection of LTBP-2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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).

Suitable for use as control antibody for LTBP-2 siRNA (h): sc-43388, LTBP-2 siRNA (m): sc-43389, LTBP-2 shRNA Plasmid (h): sc-43388-SH, LTBP-2 shRNA Plasmid (m): sc-43389-SH, LTBP-2 shRNA (h) Lentiviral Particles: sc-43388-V and LTBP-2 shRNA (m) Lentiviral Particles: sc-43389-V.

Molecular Weight of LTBP-2: 240 kDa.

Positive Controls: AMJ2-C8 whole cell lysate: sc-364366.

## 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.

## SELECT PRODUCT CITATIONS


1. Torres, S., et al. 2013. Proteome profiling of cancer-associated fibroblasts identifies novel proinflammatory signatures and prognostic markers for colorectal cancer. Clin. Cancer Res. 19: 6006-6019.


## 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.