

Human Latent TGF-β bp2/LTBP-2 Antibody

Antigen Affinity-purified Polyclonal Goat IgG Catalog Number: AF3850

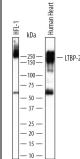
DESCRIPTION		
Species Reactivity	Human	
Specificity	Detects human Latent TGF-β bp2/LTBP-2 in direct ELISAs and Western blots. In direct ELISAs, approximately 40% cross-reactivity with recombinant mouse (rm) LTBP-2 is observed, and less than 1% cross-reactivity with recombinant human LTBP-1 and rmLTBP-4 is observed	
Source	Polyclonal Goat IgG	
Purification	Antigen Affinity-purified	
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Latent TGF-β bp2/LTBP-2 Gln36-Glu1821 Accession # Q14767	
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.	

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	1 μg/mL	See Below

DATA



Detection of Human Latent TGF- β bp2/LTBP-2 by Western Blot. Western blot shows lysates of HFL1 human fetal lung fibroblast cell line and human heart tissue. PVDF membrane was probed with 1 µg/mL of Goat Anti-Human Latent TGF- β bp2/LTBP-2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3850) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF017). A specific band was detected for Latent TGF- β bp2/LTBP-2 at approximately 210-255 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.2 mg/mL.

ShippingThe product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

*Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C

Stability & Storage

Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

LTBP-2 (Latent TGF-β Binding Protein 2; also C14orf141) is a 220-250 kDa secreted glycoprotein member of the LTBP family of proteins. In SDS-PAGE and under reducing conditions, LTBP-2 runs at 220-250 kDa; under nonreducing conditions, LTBP-2 runs between 205-220 kDa. Although it is described as being a TGF-β binding protein, it does not possess the ability to bind covalently to TGF-β. Instead, it appears to bind to heparin sulfate moieties on syndecan-4 and perlecan, plus fibrillin-1 and fibulin-5, suggesting a role in both elastic fiber formation and the maintenance of basement membrane integrity. In addition, LTPB-2 is now known to form a complex with PC5/6A intracellularly, and upon secretion, dampen PC5 activation in the extracellular environment. Cells known to express LTBP-2 include lens and nonpigmented ciliary epithelium, fibroblasts, vascular smooth muscle and chondrocytes. Mature human LTBP-2 is 1786 amino acids (aa) in length (aa 36-1821). It possesses three heparin-binding regions (aa 94-115, 232-249, and 344-354), plus 20 EGF-like domains (aa 187-1818) that contain four interspersed TGF-β type binding segments. Over aa 36-1821, human LTBP-2 shares 80% aa sequence identity with mouse LTBP-2.

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