

LTBP-3 (H-11): sc-390913

BACKGROUND

LTBP-3 (latent TGF- β -binding protein 3) is a structural component of connective tissue microfibrils that plays an essential role in TGF- β 1 secretion and targeting. LTBP-3 is present at high levels in human heart, skeletal muscle, prostate and ovaries and in certain osteosarcoma and fibroblastic cell lines. Human LTBP-3 localizes to chromosome position 11q13.1.

REFERENCES

1. Yin, W., et al. 1995. Isolation of a novel latent transforming growth factor- β binding protein gene (LTBP-3). *J. Biol. Chem.* 270: 10147-10160.
2. Yin, W., et al. 1998. Alternative splicing of LTBP-3. *Biochem. Biophys. Res. Commun.* 245: 454-458.
3. Dabovic, B., et al. 2002. Bone defects in latent TGF- β binding protein (Ltpb)-3 null mice; a role for Ltpb in TGF- β presentation. *J. Endocrinol.* 175: 129-141.
4. 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.
5. Chen, Y., et al. 2002. Latent TGF- β binding protein-3 (LTBP-3) requires binding to TGF- β for secretion. *FEBS Lett.* 517: 277-280.
6. Chen, Y., et al. 2003. Growth retardation as well as spleen and thymus involution in latent TGF- β binding protein (Ltpb)-3 null mice. *J. Cell. Physiol.* 196: 319-325.
7. Kantola, A.K., et al. 2005. Induction of human LTBP-3 promoter activity by TGF- β 1 is mediated by Smad3/4 and AP-1 binding elements. *Gene* 363: 142-150.

CHROMOSOMAL LOCATION

Genetic locus: LTBP3 (human) mapping to 11q13.1; Ltpb3 (mouse) mapping to 19 A.

SOURCE

LTBP-3 (H-11) is a mouse monoclonal antibody raised against amino acids 1041-1250; deletion 1082-1129 mapping near the C-terminus of LTBP-3 of human origin.

PRODUCT

Each vial contains 200 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

LTBP-3 (H-11) is available conjugated to agarose (sc-390913 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-390913 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-390913 PE), fluorescein (sc-390913 FITC), Alexa Fluor[®] 488 (sc-390913 AF488), Alexa Fluor[®] 546 (sc-390913 AF546), Alexa Fluor[®] 594 (sc-390913 AF594) or Alexa Fluor[®] 647 (sc-390913 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-390913 AF680) or Alexa Fluor[®] 790 (sc-390913 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

LTBP-3 (H-11) is recommended for detection of LTBP-3 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

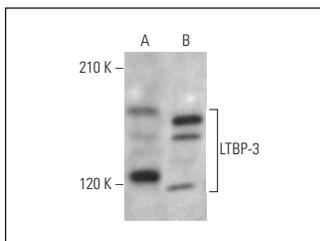
Suitable for use as control antibody for LTBP-3 siRNA (h): sc-106921, LTBP-3 siRNA (m): sc-149138, LTBP-3 shRNA Plasmid (h): sc-106921-SH, LTBP-3 shRNA Plasmid (m): sc-149138-SH, LTBP-3 shRNA (h) Lentiviral Particles: sc-106921-V and LTBP-3 shRNA (m) Lentiviral Particles: sc-149138-V.

Positive Controls: F9 cell lysate: sc-2245, HeLa whole cell lysate: sc-2200 or human skeletal muscle extract: sc-363776.

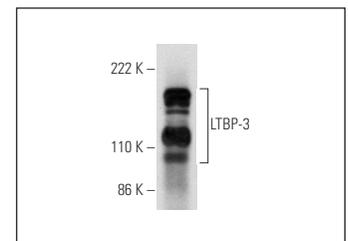
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 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 m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

DATA



LTBP-3 (H-11): sc-390913. Western blot analysis of LTBP-3 expression in HeLa (A) and F9 (B) whole cell lysates.



LTBP-3 (H-11): sc-390913. Western blot analysis of LTBP-3 expression in human skeletal muscle tissue extract.

SELECT PRODUCT CITATIONS

1. Li, B., et al. 2014. Activation of LTBP3 gene by a long noncoding RNA (lncRNA) MALAT1 transcript in mesenchymal stem cells from multiple myeloma. *J. Biol. Chem.* 289: 29365-29375.

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.