

Biglycan (h2): 293T Lysate: sc-128099

BACKGROUND

Biglycan, a class I small leucine rich proteoglycan (SLRP) present in the extracellular matrix, influences bone cell differentiation and proliferation. Biglycan contains two chondroitin sulfate glucosaminoglycan (GAG) chains attached near its amino terminus, whereas a closely related SLRP, Decorin, contains only one. Biglycan deficient specimens possess diminished capacity to produce bone cells precursors, a lessened response to TGF β , reduced collagen synthesis, and increased apoptosis. Patients with rheumatoid arthritis express increased immunity to Biglycan where whereas osteoarthritis patients do not, suggesting that higher immunity to SLRPs may play a role in the pathogenesis of inflammatory rheumatic diseases.

REFERENCES

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3. Young, M.F., Bi, Y., Ameye, L. and Chen, X.D. 2002. Biglycan knockout mice: new models for musculoskeletal diseases. *Glycoconj. J.* 19: 257-262.
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5. Waddington, R.J., Roberts, H.C., Sugars, R.V. and Schenherr, E. 2003. Differential roles for small leucine-rich proteoglycans in bone formation. *Eur. Cell Mater.* 6: 12-21.
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CHROMOSOMAL LOCATION

Genetic locus: BGN (human) mapping to Xq28.

PRODUCT

Biglycan (h2): 293T Lysate represents a lysate of human Biglycan transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

APPLICATIONS

Biglycan (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive Biglycan antibodies. Recommended use: 10-20 μ l per lane.

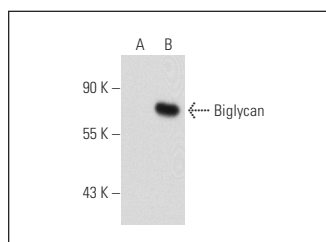
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Biglycan (3E2): sc-100857 is recommended as a positive control antibody for Western Blot analysis of enhanced human Biglycan expression in Biglycan transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

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.

DATA



Biglycan (3E2): sc-100857. Western blot analysis of Biglycan expression in non-transfected: sc-117752 (A) and human Biglycan transfected: sc-128099 (B) 293T whole cell lysates.

RESEARCH USE

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