

Decorin (h): 293 Lysate: sc-159946

BACKGROUND

Decorin is a small leucine-rich proteoglycan (SLRP) family member that consists of a glycosaminoglycan chain-containing core protein. The core protein contains ten leucine rich repeats that contain sites for glycosylation, flanked by disulfide bond stabilizing loops. Decorin binds to Collagen Type I, II and IV *in vivo* and promotes the formation of fibers with variations in stability and solubility. The Decorin core protein binds to growth factors, intercellular matrix molecules, such as Fibronectin and Thrombospondin, and to the Decorin endocytosis receptor. Decorin binds to and inhibits TGF β and is a direct or indirect negative modulator of TGF β synthesis. Inhibition of Decorin core protein gene expression by the combination of IFN- γ and TNF α may contribute to cartilage destruction that is characteristic of inflammatory joint diseases. The human Decorin gene maps to chromosome 12q21.33 and encodes a 359 amino acid protein.

REFERENCES

1. Krusius, T. and Ruoslahti, E. 1986. Primary structure of an extracellular matrix proteoglycan core protein deduced from cloned cDNA. *Proc. Natl. Acad. Sci. USA* 83: 7683-7687.
2. Dyne, K.M., Valli, M., Forlino, A., Mottes, M., Kresse, H. and Cetta, G. 1996. Deficient expression of the small proteoglycan Decorin in a case of severe/lethal osteogenesis imperfecta. *Am. J. Med. Genet.* 63: 161-166.
3. Dodge, G.R., Diaz, A., Sanz-Rodriguez, C., Reginato, A.M. and Jimenez, S.A. 1998. Effects of interferon- γ and tumor necrosis factor α on the expression of the genes encoding aggrecan, Biglycan, and Decorin core proteins in cultured human chondrocytes. *Arthritis Rheum.* 41: 274-283.
4. Stander, M., Naumann, U., Wick, W. and Weller, M. 1999. Transforming growth factor β and p21: multiple molecular targets of Decorin-mediated suppression of neoplastic growth. *Cell Tissue Res.* 296: 221-227.
5. Online Mendelian Inheritance in Man, OMIM[™]. 2001. Johns Hopkins University, Baltimore, MD. MIM Number: 125255. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
6. LocusLink Report (LocusID: 1634). <http://www.ncbi.nlm.nih.gov/LocusLink/>

CHROMOSOMAL LOCATION

Genetic locus: DCN (human) mapping to 12q21.33.

PRODUCT

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

APPLICATIONS

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

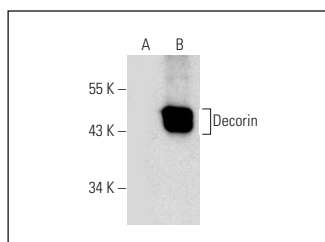
Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

Decorin (9XX): sc-73896 is recommended as a positive control antibody for Western Blot analysis of enhanced human Decorin expression in Decorin transfected 293 cells (starting dilution 1:100, dilution range 1:100-1:1,000).

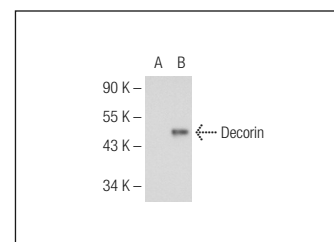
RECOMMENDED SUPPORT REAGENTS

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



Decorin (9XX): sc-73896. Western blot analysis of Decorin expression in non-transfected: sc-110760 (A) and human Decorin transfected: sc-159946 (B) 293 whole cell lysates.



Decorin (9XX): sc-73896. Western blot analysis of Decorin expression in non-transfected: sc-110760 (A) and human Decorin transfected: sc-159946 (B) 293 whole cell lysates.

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.

RESEARCH USE

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

PROTOCOLS

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