

Anti-Decorin/DCN Antibody Picoband™

Catalog Number: PB9174

About DCN

Decorin is a protein that in humans is encoded by the DCN gene. This gene is mapped to 12q21.3. It belongs to the small leucine-rich proteoglycan (SLRP) family and consists of a protein core containing leucine repeats with a glycosaminoglycan (GAG) chain consisting of either chondroitin sulfate (CS) or dermatan sulfate (DS). Decorin is a small cellular or pericellular matrix proteoglycan and is closely related in structure to biglycan protein. This protein is a component of connective tissue, binds to type I collagen fibrils, and plays a role in matrix assembly. And it also may play a role in epithelial/mesenchymal interactions during organ development and shaping. Decorin has been shown to have anti-tumorigenic properties in an experimental murine tumor model and is capable of suppressing the growth of various tumor cell lines.

Overview

Product Name	Anti-Decorin/DCN Antibody Picoband™
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-Decorin/DCN Antibody Picoband™ catalog # PB9174. Tested in IHC, WB applications. This antibody reacts with Human, Mouse, Rat.
Application	IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl and 0.2 mg Na ₂ HPO ₄ .
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P07585

Technical Details

Immunogen	E.coli-derived human Decorin recombinant protein (Position: D31-K359). Human Decorin shares 80% and 77% amino acid (aa) sequences identity with mouse and rat Decorin, respectively.
Predicted Reactive Species	Hamster
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P).
Cross Reactivity	No cross-reactivity with other proteins
Isotype	Rabbit IgG
Form	Lyophilized

Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	<p>Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.</p> <p>If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.</p> <p>Some PubMed article(s) citing the expression level of this target are as follows:</p> <p>Boster Bio's internal QC testing used:</p> <p>Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Human, By Heat</p> <p>Western blot, 0.1-0.5ug/ml, Human, Mouse, Rat</p>

Anti-Decorin/DCN Antibody Picoband™ (PB9174) Images

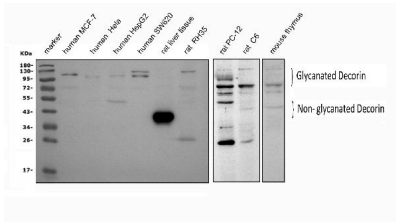


Figure 1. Western blot analysis of Decorin using anti-Decorin antibody (PB9174).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.

Lane 1: human MCF-7 whole cell lysates,

Lane 2: human Hela whole cell lysates,

Lane 3: human HepG2 whole cell lysates,

Lane 4: human SW620 whole cell lysates,

Lane 5: rat liver tissue lysates,

Lane 6: rat RH35 whole cell lysates,

Lane 7: rat PC-12 whole cell lysates,

Lane 8: rat C6 whole cell lysates,

Lane 9: mouse thymus tissue lysates.

After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes.

Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5

hour at RT. The membrane was incubated with rabbit anti-

Decorin antigen affinity purified polyclonal antibody (Catalog

PB9174) at 0.5 ug/mL overnight at 4°C, then washed with

TBS-0.1%Tween 3 times with 5 minutes each and probed

with a goat anti-rabbit IgG-HRP secondary antibody at a

dilution of 1:5000 for 1.5 hour at RT. The signal is developed

using an Enhanced Chemiluminescent detection (ECL) kit

(Catalog # EK1002) with Tanon 5200 system. Specific bands

were detected for Decorin at approximately 40-50KD and

80-140KD. The expected band sizes for Decorin are at

40-50KD and 80-140KD.

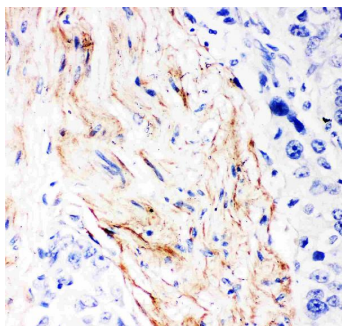


Figure 2. IHC analysis of Decorin using anti-Decorin antibody (PB9174).

Decorin was detected in a paraffin-embedded section of

human mammary cancer tissue. Heat mediated antigen

retrieval was performed in EDTA buffer (pH 8.0, epitope

retrieval solution). The tissue section was blocked with 10%

goat serum. The tissue section was then incubated with 1

ug/ml rabbit anti-Decorin Antibody (PB9174) overnight at

4°C. Biotinylated goat anti-rabbit IgG was used as secondary

antibody and incubated for 30 minutes at 37°C. The tissue

section was developed using Streptavidin-Biotin-Complex

(SABC) (Catalog # SA1022) with DAB as the chromogen.

3 Publications Citing This Product

1. PubMed ID: 27713567, An Animal Model of Modic Changes by Embedding Autogenous Nucleus Pulposus inside Subchondral Bone of Lumbar Vertebrae

2. PubMed ID: 24987434, Huang Gf, Zou J, Shi J, Zhang Dy, Pen Hf, Zhang Q, Gao Y, Wang By. Evid Based Complement Alternat Med.

2014;2014:731395. Doi: 10.1155/2014/731395. Epub 2014 May 27. The Effect Of Electroacupuncture On The Extracellular Matrix Synthesis And Degrada...

3. PubMed ID: 28290552, Lai J, Chen F, Chen J, Ruan G, He M, Chen C, Tang J, Wang DW. Sci Rep. 2017 Mar 14;7:44473. doi: 10.1038/srep44473. Overexpression of decorin promoted angiogenesis in diabetic cardiomyopathy via IGF1R-AKT-VEGF signaling

Visit bosterbio.com/anti-decorin-picoband-trade-antibody-pb9174-boster.html to see all 3 publications.

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