

# **Anti-Decorin/DCN Antibody**

Catalog Number: PA1314

### **About DCN**

Decorin is a proteoglycan on average 90-140 kilodaltons (kD) in size. The human decorin gene spans more than 38 kb and contains 8 exons and very large introns, 2 of which are 5.4 and more than 13.2 kb. And the human decorin 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. Decorin and biglycan are though to be the result of a gene duplication. 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. There are multiple alternatively spliced transcript variants known for the decorin gene. Mutations in the decorin gene are associated with congenital stromal corneal dystrophy.

#### Overview

Product Name	Anti-Decorin/DCN Antibody
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-Decorin/DCN Antibody catalog # PA1314. Tested in WB applications. This antibody reacts with Human, Mouse, Rat.
Application	WB
Clonality	Polyclonal
Formulation	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.
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	A synthetic peptide corresponding to a sequence at the C-terminus of human Decorin, identical to the related mouse sequence, and different from the related rat sequence by three amino acids.
Predicted Reactive Species	Hamster
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot.
Cross Reactivity	No cross-reactivity with other proteins





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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	Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.  If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.  Some PubMed article(s) citing the expression level of this target are as follows:  Boster Bio's internal QC testing used:  Western blot, 0.1-0.5ug/ml, Human, Mouse, Rat



### Anti-Decorin/DCN Antibody (PA1314) Images

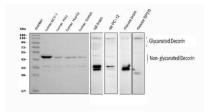


Figure 1. Western blot analysis of Decorin using anti-Decorin antibody (PA1314).

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 brain tissue lysates,

Lane 6: rat PC-12 whole cell lysates,

Lane 7: mouse brain tissue lysates,

Lane 8: mouse SP2/0 whole cell 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 # PA1314) 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.

# **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

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