Decorin (DCN) ELISA Kit for Human

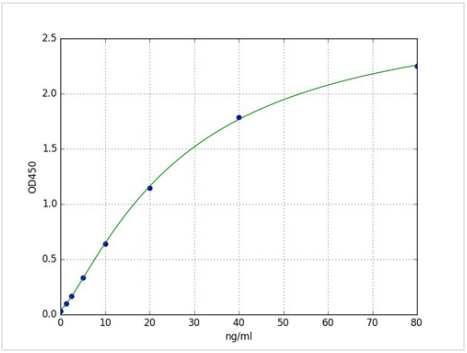
PRODUCT OVERVIEW

Product Name	Decorin (DCN), ELISA Kit
Full Product Name	Human Decorin ELISA Kit
Product Gene Name	DCN elisa kit
Product Synonym Names	DCN (Decorin)/DSPG2/PG-II/PGS2/SLRR1B/Bone proteoglycan II/CSCD/PG40/PGII/PG-S2
Species Reactivity	Human
Assay Type	Sandwich ELISA, Double Antibody
Samples	Serum, Plasma, Cell Culture Supernatant, cell or tissue lysate, Other liquid samples
Detection Range	62.5-4000pg/ml
Sensitivity	37.5pg/ml
Preparation and Storage	Store entire kit at 2-8C for short-term. For longer-term, please store the microplate & standard at -20C, while the remaining reagents can be stored at 2-8C
Molecular Weight	8,266 Da
OMIM	125255
ISO Certification	Manufactured in an ISO 13485:2003 and EN ISO 13485:2012 Certified Laboratory.
Related Product Information for DCN elisa kit	Principle of the Assay||This kit was based on sandwich enzyme-linked immune-sorbent assay technology. Anti-human DCNantibody was pre-coated onto 96-well plates. And the biotin conjugated anti-human DCN antibody was used as detection antibodies. The standards, test samples and biotin conjugated detection antibody were added to the wells subsequently, and wash with wash buffer. HRP-Streptavidin was added and unbound conjugates were washed away with wash buffer. TMB substrates were used to visualize HRP enzymatic reaction. TMB was catalyzed by HRP to produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional to the human DCN amount of sample captured in plate. Read the O.D. absorbance at 450nm in a microplate reader, and then the concentration ofhuman DCNcan be calculated.
Other Notes	Small volumes of DCN elisa kit vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for DCN purchase	MBS762622 is a ready-to-use microwell, strip plate ELISA (enzyme-linked immunosorbent assay) Kit for analyzing the presence of the Decorin (DCN) ELISA Kit target analytes in biological samples. The concentration gradients of the kit standards or positive controls render a theoretical kit detection range in biological research samples containing DCN. The ELISA analytical biochemical technique of the MBS762622 kit is based on DCN antibody-DCN antigen interactions (immunosorbency) and an HRP colorimetric detection system to detect DCN antigen targets in samples. The ELISA Kit is designed to detect native, not recombinant, DCN. Appropriate sample types may include undiluted body fluids and/or tissue homogenates, secretions. Quality control assays assessing reproducibility identified the intra-assay CV (%) and inter-assay CV(%).

Results of a typical standard run of a human DCN ELISA Kit are shown below. This standard curve was generated at our lab for demonstration purpose only. Each user should obtain their own standard curve as per experiment. (N/A=not applicable)

X	ng/ml	0	1.25	2.5	5	10	20	40	80
Y	OD450	0.018	0.169	0.303	0.564	0.926	1.312	1.782	2.011

Typical Testing Data of DCN elisa kit



Typical Standard Curve of DCN elisa kit

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for DCN. It may not necessarily be applicable to this product.

NCBI GI #	19743846
NCBI GeneID	1634
NCBI Accession #	NP_598010.1
UniProt Secondary Accession #	Q9P0Z0; Q9P0Z1; Q9Y5N8; Q9Y5N9
UniProt Related Accession #	P07585
GenBank Nucleotide #	NM_133503.3
NCBI Official Full Name	decorin isoform a preproprotein
NCBI Official Synonym Full Names	decorin
NCBI Official Symbol	DCN
NCBI Official Synonym Symbols	CSCD; PG40; PGII; PGS2; DSPG2; SLRR1B
UniProt Protein Name	Decorin
UniProt Synonym Protein Names	Bone proteoglycan II; PG-S2; PG40
Protein Family	Decorin
UniProt Gene Name	DCN
UniProt Synonym Gene Names	SLRR1B
UniProt Entry Name	PGS2_HUMAN
NCBI Protein Information	decorin
NCBI Summary for DCN	This gene encodes a member of the small leucine-rich proteoglycan family of proteins. Alternative splicing results in multiple transcript variants, at least one of which encodes a preproprotein that is proteolytically processed to generate the mature protein. This protein plays a role in collagen fibril assembly. Binding of this protein to multiple cell surface receptors mediates its role in tumor suppression, including a stimulatory effect on autophagy and inflammation and an inhibitory effect on angiogenesis and tumorigenesis. This gene and the related gene biglycan are thought to be the result of a gene duplication. Mutations in this gene are associated with congenital stromal corneal dystrophy in human patients. [provided by RefSeq, Nov 2015]

UniProt Comments for DCN	DCN: May affect the rate of fibrils formation. Defects in DCN are the cause of congenital stromal corneal dystrophy (CSCD). Corneal dystrophies are inherited, bilateral, primary alterations of the cornea that are not associated with prior inflammation or secondary to systemic disease. Most show autosomal dominant inheritance. Belongs to the small leucine-rich proteoglycan (SLRP) family. SLRP class I subfamily. 5 isoforms of the human protein are produced by alternative splicing. Protein type: Secreted, signal peptide; Motility/polarity/chemotaxis; Secreted; Extracellular matrix Chromosomal Location of Human Ortholog: 12q21.33 Cellular Component: collagen type VI; cytoplasm; extracellular matrix; extracellular region; extracellular space; Golgi lumen; lysosomal lumen Molecular Function: collagen binding; extracellular matrix binding; glycosaminoglycan binding; protein kinase inhibitor activity; protein N-terminus binding Biological Process: aging; carbohydrate metabolic process; chondroitin sulfate biosynthetic process; chondroitin sulfate catabolic process; chondroitin sulfate metabolic process; cytokine and chemokine mediated signaling pathway; dermatan sulfate biosynthetic process; extracellular matrix disassembly; extracellular matrix organization and biogenesis; glycosaminoglycan metabolic process; kidney development; negative regulation of angiogenesis; negative regulation of JAK-STAT cascade; negative regulation of protein kinase activity; organ morphogenesis; peptide cross-linking via chondroitin 4-sulfate glycosaminoglycan; placenta development; positive regulation of autophagy; positive regulation of macroautophagy; positive regulation of mitochondrial depolarization; positive regulation of phosphoinositide 3-kinase cascade; positive regulation of transcription from RNA polymerase II promoter; response to lipopolysaccharide; response to mechanical stimulus; skeletal muscle development; wound healing Disease: Corneal Dystrophy, Congenital Stromal
Research Articles on DCN	**1.** findings indicate that decorin may indirectly act as an antagonist to MM cell survival and that the interplay between MM and decorin may be an important target to explore in manipulating the tumor niche to inhibit tumorigenesis
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