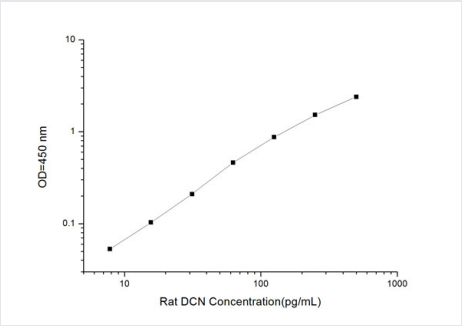
DCN ELISA Kit for Rat

PRODUCT OVERVIEW

Product Name	DCN, ELISA Kit
Full Product Name	Rat DCN (Decorin) ELISA Kit
Product Gene Name	DCN elisa kit
Species Reactivity	Rat
Assay Type	Sandwich
Samples	Serum, Plasma, Biological Fluids
Detection Range	7.813-500pg/mL
Sensitivity	Min: 4.688pg/mL; Max: 500pg/mL
Specificity	This assay has high sensitivity and excellent specificity for detection of Rat DCN. No significant cross-reactivity or interference between Rat DCN and analogues was observed. Note: Limited by current skills and knowledge, it is impossible for us to complete the cross- reactivity detection between Rat DCN and all the analogues, therefore, cross reaction may still exist.
Preparation and Storage	Store at 4 degree C.
Molecular Weight	8,266 Da
OMIM	125255
3D Structure	ModBase 3D Structure for P07585
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Related Product Information for DCN elisa kit	**Description:** The kit is a sandwich enzyme immunoassay for in vitro quantitative measurement of DCN in Rat serum, plasma and other biological fluids **Principle of the Assay:** This ELISA kit uses Sandwich-ELISA as the method. The micro ELISA plate provided in this kit has been pre-coated with an antibody specific to Rat DCN. Standards or samples are added to the appropriate micro ELISA plate wells and bound by the specific antibody. Then a biotinylated detection antibody specific for Rat DCN and Avidin-Horseradish Peroxidase (HRP) conjugate is added to each micro plate well successively and incubated. Free components are washed away. The substrate solution is added to each well. Only those wells that contain Rat DCN, biotinylated detection antibody and Avidin-HRP conjugate will appear blue in color. The enzyme-substrate reaction is terminated by the addition of a sulphuric acid solution and the color turns yellow. The optical density (OD) is measured spectrophotometrically at a wavelength of 450 nm +/- 2 nm. The OD value is proportional to the concentration of Rat DCN. You can calculate the concentration of Rat DCN in the samples by comparing the OD of the samples to the standard curve.
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	MBS2501519 is a ready-to-use microwell, strip-or-full plate ELISA (enzyme-linked immunosorbent assay) Kit for analyzing the presence of the 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 MBS2501519 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(%).



Typical Testing Data/Standard Curve (for reference only) 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 #	19743854
NCBI GeneID	1634
NCBI Accession #	NP_598014.1
UniProt Primary Accession #	P07585
UniProt Secondary Accession #	Q9P0Z0; Q9P0Z1; Q9Y5N8; Q9Y5N9
UniProt Related Accession #	P07585
GenBank Nucleotide #	NM_133507.2
NCBI Official Full Name	decorin isoform e
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; PG-S2; bone proteoglycan II; decorin proteoglycan; dermatan sulphate proteoglycans II; proteoglycan core protein; small leucine-rich protein 1B
NCBI Summary for DCN	The protein encoded by this gene is a small cellular or pericellular matrix proteoglycan that is closely related in structure to biglycan protein. The encoded protein and biglycan are thought 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. It contains one attached glycosaminoglycan chain. This protein is capable of suppressing the growth of various tumor cell lines. There are multiple alternatively spliced transcript variants known for this gene. This gene is a candidate gene for Marfan syndrome. [provided by RefSeq, Jul 2008]

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; Extracellular matrix; Secreted, signal peptide; Motility/polarity/chemotaxis Chromosomal Location of Human Ortholog: 12q21.33 Cellular Component: extracellular matrix; lysosomal lumen; proteinaceous extracellular matrix; extracellular space; Golgi lumen; extracellular region; collagen type VI Molecular Function: collagen binding; glycosaminoglycan binding; extracellular matrix binding; protein N-terminus binding Biological Process: extracellular matrix organization and biogenesis; skeletal muscle development; chondroitin sulfate biosynthetic process; wound healing; glycosaminoglycan metabolic process; pathogenesis; response to lipopolysaccharide; dermatan sulfate biosynthetic process; chondroitin sulfate metabolic process; extracellular matrix disassembly; organ morphogenesis; response to mechanical stimulus; carbohydrate metabolic process; chondroitin sulfate catabolic process; kidney development; peptide cross-linking via chondroitin 4-sulfate glycosaminoglycan; aging; placenta development Disease: Corneal Dystrophy, Congenital Stromal
Research Articles on DCN	**1.** Lumican, decorin and dermatopontin are differentially expressed and may serve as biomarkers for metastatic and recurrent Giant cell tumor of bone
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
Disclaimer	While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice. It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information.
Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

MyBioSource | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/rat-elisa-kits/dcn/2501519