**Product name**: Human Decorin ELISA Kit (DCN)

**Detection method**: Colorimetric

**Sample type**: Cell culture supernatant, Serum, Plasma

**Assay type**: Sandwich (quantitative)

**Sensitivity**: < 1.5 pg/ml

**Range**: 0.96 pg/ml - 700 pg/ml

**Recovery**: > 93%

**Sample specific recovery**

<table>
<thead>
<tr>
<th>Sample type</th>
<th>Average %</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cell culture supernatant</td>
<td>93.82</td>
<td>84% - 104%</td>
</tr>
<tr>
<td>Serum</td>
<td>122.5</td>
<td>111% - 130%</td>
</tr>
<tr>
<td>Plasma</td>
<td>111.8</td>
<td>103% - 119%</td>
</tr>
</tbody>
</table>

**Assay duration**: Multiple steps standard assay

**Species reactivity**: Reacts with: Human

**Product overview**: Abcam’s Decorin (DCN) Human ELISA (Enzyme-Linked Immunosorbent Assay) kit is an in vitro enzyme-linked immunosorbent assay for the quantitative measurement of Human Decorin in serum, plasma, and cell culture supernatants.

This assay employs an antibody specific for Human Decorin coated on a 96-well plate. Standards and samples are pipetted into the wells and Decorin present in a sample is bound to the wells by the immobilized antibody. The wells are washed and biotinylated anti Human Decorin antibody is added. After washing away unbound biotinylated antibody, HRP-conjugated streptavidin is pipetted to the wells. The wells are again washed, a TMB substrate solution is added to the wells and color develops in proportion to the amount of Decorin bound. The Stop Solution changes the color from blue to yellow, and the intensity of the color is measured at 450 nm.

**Notes**: Optimisation may be required with urine samples.

**Tested applications**: Suitable for: Sandwich ELISA

**Platform**: Microplate
Properties

Storage instructions
Store at -20°C. Please refer to protocols.

Components

<table>
<thead>
<tr>
<th>Components</th>
<th>1 x 96 tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>200X HRP-Streptavidin Concentrate</td>
<td>1 x 200µl</td>
</tr>
<tr>
<td>20X Wash Buffer Concentrate</td>
<td>1 x 25ml</td>
</tr>
<tr>
<td>5X Assay Diluent</td>
<td>1 x 15ml</td>
</tr>
<tr>
<td>Biotinylated anti-Human Decorin (lyophilized)</td>
<td>2 vials</td>
</tr>
<tr>
<td>Decorin Microplate (12 x 8 well strips)</td>
<td>1 unit</td>
</tr>
<tr>
<td>Recombinant Human Decorin Standard (lyophilized)</td>
<td>2 vials</td>
</tr>
<tr>
<td>Stop Solution</td>
<td>1 x 8ml</td>
</tr>
<tr>
<td>TMB One-Step Substrate Reagent</td>
<td>1 x 12ml</td>
</tr>
</tbody>
</table>

Function
May affect the rate of fibrils formation.

Involvement in disease
Defects in DCN are the cause of congenital stromal corneal dystrophy (CSCD) [MIM:610048]. 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.

Sequence similarities
Belongs to the small leucine-rich proteoglycan (SLRP) family. SLRP class I subfamily. Contains 12 LRR (leucine-rich) repeats.

Post-translational modifications
The attached glycosaminoglycan chain can be either chondroitin sulfate or dermatan sulfate depending upon the tissue of origin.

Cellular localization
Secreted > extracellular space > extracellular matrix.

Applications
Our Abpromise guarantee covers the use of ab99998 in the following tested applications.
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sandwich ELISA</td>
<td></td>
<td>Use at an assay dependent concentration.</td>
</tr>
</tbody>
</table>

Images
DCN measured in biological fluids showing quantity (pg) per mL of tested sample

Representative Standard Curve using ab99998.

Typical Standard Curve

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