**DESCRIPTION**

**Species Reactivity**  
Mouse

**Specificity**  
Detects mouse Decorin in ELISAs and Western blots. In sandwich immunoassays, less than 0.05% cross-reactivity with recombinant human Decorin is observed.

**Source**  
Polyclonal Goat IgG

**Purification**  
Antigen Affinity-purified

**Immunogen**  
Mouse myeloma cell line NS0-derived recombinant mouse Decorin Gly17-Lys354 Accession # P28654

**Formulation**  
Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

*Small pack size (-SP) is supplied either lyophilized or as a 0.2 μm filtered solution in PBS.

**APPLICATONS**

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

<table>
<thead>
<tr>
<th>Recommended Concentration</th>
<th>Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western Blot</td>
<td>0.5 μg/mL See Below</td>
</tr>
<tr>
<td>Immunohistochemistry</td>
<td>5-15 μg/mL Immersion fixed frozen sections of mouse embryo (13 d.p.c., dorsal root ganglion)</td>
</tr>
<tr>
<td>Simple Western</td>
<td>10 μg/mL</td>
</tr>
</tbody>
</table>

**Mouse Decorin Sandwich Immunoassay**

<table>
<thead>
<tr>
<th>ELISA Capture</th>
<th>Reagent</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.2-0.8 μg/mL</td>
<td>Mouse Decorin Antibody (Catalog # AF1060)</td>
</tr>
<tr>
<td>ELISA Detection</td>
<td>Mouse Decorin Biotinylated Antibody (Catalog # BAF1060)</td>
</tr>
<tr>
<td>0.1-0.4 μg/mL</td>
<td>Recombinant Mouse Decorin (Catalog # 1060-DE)</td>
</tr>
</tbody>
</table>

**DATA**

Detection of Mouse Decorin by Western Blot. Western blot shows lysates of mouse adipose tissue and mouse colon tissue. PVDF membrane was probed with 0.5 μg/mL of Goat Anti-Mouse Decorin Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1060) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF017). Specific bands were detected for Decorin at approximately 94 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Detection of Mouse Decorin by Simple Western™. Simple Western lane view shows lysates of mouse adipose tissue and mouse colon tissue, loaded at 0.2 mg/mL. A specific band was detected for Decorin at approximately 94 kDa (as indicated) using 10 μg/mL of Goat Anti-Mouse Decorin Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1060) followed by 1:50 dilution of HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF017). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.

**PREPARATION AND STORAGE**

**Reconstitution**  
Reconstitute at 0.2 mg/mL in sterile PBS.

**Shipping**  
The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C*

**Stability & Storage**  
Use a manual defrost freezer and avoid repeated freeze-thaw cycles.  
- 12 months from date of receipt, -20 to -70 °C as supplied.  
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.  
- 6 months, -20 to -70 °C under sterile conditions after reconstitution.

**BACKGROUND**

Decorin is a small secreted chondroitin/dermatan sulfate proteoglycan belonging to the class I small leucine-rich proteoglycan family (SLRP). All SLRP family members are characterized by the N-terminal and C-terminal cysteine-rich regions, which flank the central region containing 10-12 tandem leucine-rich repeats. In mouse Decorin, the glycosaminoglycan chain is O-linked to Ser34 in the N-terminal disulfide-bridged loop. Decorin binds to fibronectin, TGF-β, type I and type II collagen. The binding of Decorin to these molecules is mediated via the core protein. Decorin plays a role in maintaining collagen fibrillogenesis. Depending on the cell context, Decorin can either block or augment the bioactivity of TGF-β. Decorin induces growth suppression by activation of a signaling pathway that culminates in the blockade of the cell cycle machinery. Decorin can also induce fibroblast cytoskeletal and signalling changes that results in an increased cell migration (1, 2).

**REFERENCES**