

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.

APPLICATIONS

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.

	Recommended Concentration	Sample
Western Blot	0.1 µg/mL	Recombinant Mouse Decorin (Catalog # 1060-DE)
Immunohistochemistry	5-15 µg/mL	Immersion fixed frozen sections of mouse embryo (13 d.p.c., dorsal root ganglion)
Mouse Decorin Sandwich Immunoassay		Reagent
ELISA Capture	0.2-0.8 µg/mL	Mouse Decorin Antibody (Catalog # AF1060)
ELISA Detection	0.1-0.4 µg/mL	Mouse Decorin Biotinylated Antibody (Catalog # BAF1060)
Standard		Recombinant Mouse Decorin (Catalog # 1060-DE)

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.
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 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:

1. Iozzo, R.V. (1998) Annu. Rev. Biochem. **67**:609.
2. Tufvesson, E. and G. Westergren-Thorsson (2003) J. Cell Science **116**:4857.