Human Decorin Antibody

Monoclonal Mouse IgG_1 Clone # 115402

Catalog Number: MAB143

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Decorin in direct ELISAs and Western blots. In direct ELISAs, this antibody does not cross-react with recombinant mouse Decorin.
Source	Monoclonal Mouse IgG_1 Clone # 115402
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	*S. frugiperda* insect ovarian cell line *Sf* 21-derived recombinant human Decorin Gly17-Lys172 Accession # NP_598013.1
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.

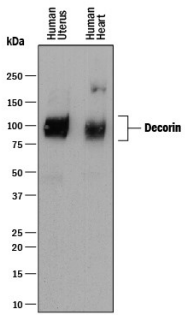
APPLICATIONS

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	1 µg/mL	See Below
Simple Western	10 µg/mL	See Below

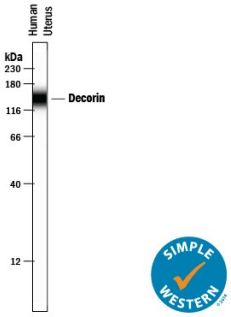
DATA

Western Blot



Detection of Human Decorin by Western Blot. Western blot shows lysates of human uterus tissue and human heart tissue. PVDF membrane was probed with 1 µg/mL of Mouse Anti-Human Decorin Monoclonal Antibody (Catalog # MAB143) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # Catalog # HAF018). A specific band was detected for Decorin at approximately 100 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Simple Western



Detection of Human Decorin by Simple Western™. Simple Western lane view shows lysates of human uterus tissue, loaded at 0.2 mg/mL. A specific band was detected for Decorin at approximately 145 kDa (as indicated) using 10 µg/mL of Mouse Anti-Human Decorin Monoclonal Antibody (Catalog # MAB143) . This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 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 in the family of small leucine-rich proteoglycans (SLRPs). SLRP family members are characterized by N-terminal and C-terminal cysteine-rich regions which flank the central region containing 10-12 tandem leucine-rich repeats (LRR) (1, 2). The human Decorin cDNA encodes a 359 amino acid (aa) precursor that includes a 16 aa signal sequence and a 14 aa propeptide. The 329 aa mature protein contains twelve LRR. Alternate splicing generates five isoforms with variable length deletions (3). Mature human and mouse Decorin share 80% aa sequence identity. In Decorin, serine 34 in the N-terminal domain is O-glycosylated. Naturally occurring Decorin proteoglycan has a molecular mass of approximately 100 kDa, and the deglycosylated Decorin core protein has a mass of approximately 40 kDa. Decorin binds to fibronectin, TGF-β, and type I and type II collagens. The binding of Decorin to various molecules was reported to be mediated *via* the core protein. Decorin has been implicated in matrix assembly and has also been reported to suppress the growth of various tumor cell lines by activating the epidermal growth factor receptor.

References:

1. Naito, Z. (2005) J. Nippon Med. Sch. **72**:137.
2. Matsushima, N. *et al.* (2005) Cell. Mol. Life Sci. **62**:2771.
3. Danielson, K. *et al.* (1993) Genomics **15**:146.

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Global bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL +1 612 379 2956
USA TEL 800 343 7475 Canada TEL 855 668 8722 China TEL +86 (21) 52380373
Europe | Middle East | Africa TEL +44 (0)1235 529449