Human Dermatopontin Antibody

Antigen Affinity-purified Polyclonal Sheep IgG
Catalog Number: AF4629

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Dermatopontin in direct ELISAs and Western blots. In direct ELISAs, approximately 50% cross-reactivity with recombinant mouse Dermatopontin is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Dermatopontin Gln19-Val201 Accession # AAH33736
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.

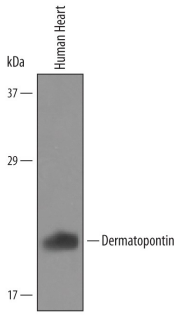
APPLICATIONS

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

DATA

Western Blot



Detection of Human Dermatopontin by Western Blot. Western blot shows lysates of human heart tissue. PVDF Membrane was probed with 1 µg/mL of Human Dermatopontin Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4629) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for Dermatopontin at approximately 22 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 8.

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.2 mg/mL.
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.

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BACKGROUND

Dermatopontin, also known as TRAMP (tyrosine rich acidic matrix protein), is a widely expressed noncollagenous protein component of the extracellular matrix (1, 2). Mature human Dermatopontin shares 96%, 92%, and 92% amino acid sequence identity with bovine, mouse, and rat Dermatopontin, respectively. It is a 22 kDa molecule that is tyrosine sulfated but not glycosylated (3, 4). Dermatopontin contains three disulfide bonded loop structures that enclose conserved hexapeptide motifs (5). It accelerates collagen fibril formation *in vitro*, and Dermatopontin deficient mice exhibit altered collagen matrix deposition and organization (6 - 8). Dermatopontin is downregulated in fibrotic growths such as leiomyoma and scar tissue (9, 10). It binds both TGF-β and the proteoglycan decorin, interactions that can increase the bioavailability of TGF-β (11, 12). Dermatopontin promotes bone mineralization under the control of the vitamin D receptor and inhibits BMP-2 effects on osteoblast precursors (13, 14).

References:

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