

## DESCRIPTION

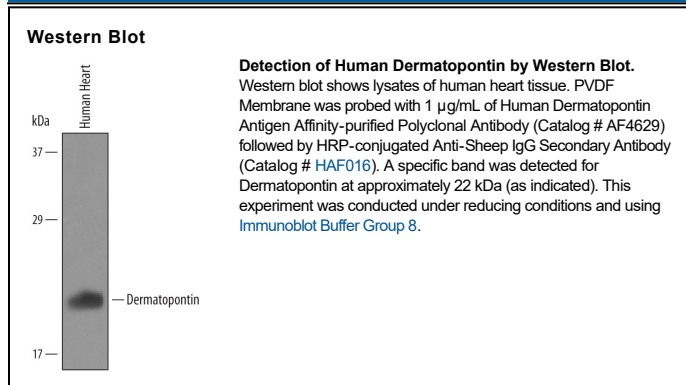
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human Dermatopontin in direct ELISAs and Western blots. In direct ELISAs, approximately 50% cross-reactivity with recombinant mouse Dermatopontin is observed.
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant human Dermatopontin Gln19-Val201 Accession # AAH33736
<b>Formulation</b>	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
<b>Western Blot</b>	1 µg/mL	See Below

## DATA



## PREPARATION AND STORAGE

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.2 mg/mL.
<b>Shipping</b>	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
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

**BACKGROUND**

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