



# Anti-TIMP1 polyclonal antibody [Biotin] (DPABY-437)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

<b>Antigen Description</b>	TIMPs-1 through -4 regulate the activity of zinc metalloproteases known as MMPs, ADAMs and ADAMTSs. Structurally, TIMPs contain two domains. The N-terminal domain binds to the active site of mature metalloproteases via a 1:1 non-covalent interaction, blocking access of substrates to the catalytic site. In addition, The C-terminal domain of TIMP-1 and TIMP-2 binds to the hemopexin- like domain of pro-MMP-9 and pro-MMP-2, respectively. The latter binding is essential for the cell surface activation of MMP-2 by MMP-14.
<b>Specificity</b>	Detects rat TIMP-1 in ELISAs and Western blots. In sandwich immunoassays, less than 0.5% cross-reactivity with recombinant human (rh)TIMP-1, recombinant mouse (rm)TIMP-1, rhTIMP-2, rhTIMP-3, and rhTIMP-4 is observed.
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant rat TIMP-1. Cys24-Ala217 Accession Number P30120
<b>Isotype</b>	IgG
<b>Source/Host</b>	Goat
<b>Species Reactivity</b>	Rat
<b>Purification</b>	Antigen Affinity-purified
<b>Conjugate</b>	Biotin
<b>Applications</b>	Western Blot, ELISA Detection (Matched Pair)
<b>Format</b>	Liquid
<b>Size</b>	50 µg
<b>Buffer</b>	Lyophilized from a 0.2 µm filtered solution in PBS with BSA as a carrier protein.

<b>Preservative</b>	None
<b>Storage</b>	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <p>12 months from date of receipt, -20 to -70 °C as supplied.</p> <p>1 month, 2 to 8 °C under sterile conditions after reconstitution.</p> <p>6 months, -20 to -70 °C under sterile conditions after reconstitution.</p>

## GENE INFORMATION

<b>Gene Name</b>	<a href="#">Timp1 TIMP metalloproteinase inhibitor 1 [ Rattus norvegicus (Norway rat) ]</a>
<b>Official Symbol</b>	TIMP1
<b>Synonyms</b>	TIMP1; TIMP metalloproteinase inhibitor 1; Timp; TIMP-1; metalloproteinase inhibitor 1; tissue inhibitor of metalloproteinase 1; tissue inhibitor of metalloproteinase 1; tissue inhibitor of metalloproteinases 1;
<b>Entrez Gene ID</b>	<a href="#">116510</a>
<b>Protein Refseq</b>	<a href="#">NP_446271</a>
<b>UniProt ID</b>	<a href="#">P30120</a>
<b>Chromosome Location</b>	Xq12
<b>Pathway</b>	Activation of Matrix Metalloproteinases; Degradation of the extracellular matrix; Extracellular matrix organization; HIF-1 signaling pathway; Hemostasis; Matrix Metalloproteinases; Platelet activation, signaling and aggregation; Platelet degranulation;
<b>Function</b>	cytokine activity; growth factor activity; metal ion binding; metalloendopeptidase inhibitor activity; protease binding;