



# Anti-MMP9 monoclonal antibody, clone 227245 (DCABY-4049)

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

## PRODUCT INFORMATION

<b>Antigen Description</b>	The matrix metalloproteinases (MMPs) consist of 24 known human zinc proteases with essential roles in breaking down components of the extracellular matrix (ECM). Additional MMP substrates include cytokines, chemokines, growth factors and binding proteins, cell/cell adhesion molecules, and other proteinases. With a few exceptions, MMPs share common structural motifs including a pro-peptide domain, a catalytic domain, a hinge region, and a hemopexin-like domain. Synthesized as pro-enzymes, most MMPs are secreted before conversion to their active form. MMP activities are modulated on several levels including transcription, pro-enzyme activation, or by their endogenous inhibitors, tissue inhibitors of metalloproteinases (TIMPs). A subset of MMPs are associated with membranes and designated as membrane-type metalloproteinases (MT-MMP).
<b>Specificity</b>	Detects mouse Pro-MMP-9 in ELISAs. This antibody does not recognize the mature form of Pro-MMP-9.
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant mouse MMP-9. Ala20-Pro730 Accession Number P41245.1
<b>Isotype</b>	IgG2a
<b>Source/Host</b>	Rat
<b>Species Reactivity</b>	Mouse
<b>Clone</b>	227245
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	ELISA Capture (Matched Pair)

<b>Format</b>	Liquid
<b>Size</b>	500 µg
<b>Buffer</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose.
<b>Preservative</b>	None
<b>Storage</b>	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 from date of receipt, 2 to 8 °C, reconstituted. 6 months from date of receipt, -20 to -70 °C, reconstituted.

## GENE INFORMATION

<b>Gene Name</b>	<a href="#">Mmp9 matrix metalloproteinase 9 [ Mus musculus (house mouse) ]</a>
<b>Official Symbol</b>	MMP9
<b>Synonyms</b>	MMP9; matrix metalloproteinase 9; Clg4b; MMP-9; B/MMP9; AW743869; pro-MMP-9; matrix metalloproteinase-9; GELB; Gel B; gelatinase B; 92kD gelatinase; 92kDa gelatinase; 92 kDa gelatinase; collagenase type IVB; 92kD type IV collagenase; 92kDa type IV collagen
<b>Entrez Gene ID</b>	<a href="#">17395</a>
<b>Protein Refseq</b>	<a href="#">NP_038627</a>
<b>UniProt ID</b>	<a href="#">P41245</a>
<b>Chromosome Location</b>	2 H1-H2; 2 85.27 cM
<b>Pathway</b>	Activation of Matrix Metalloproteinases; Bladder cancer; Collagen degradation; Degradation of the extracellular matrix; Endochondral Ossification; Estrogen signaling pathway; Extracellular matrix organization; Hepatitis B;
<b>Function</b>	fibronectin binding; hydrolase activity; identical protein binding; metal ion binding; metalloendopeptidase activity; metalloproteinase activity; peptidase activity; protein complex binding; zinc ion binding;