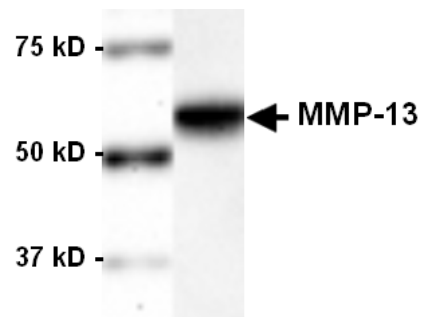




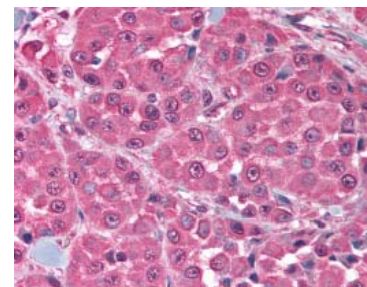
## Product Data Sheet

<b>Product Name:</b>	<b>Anti-MMP-13 (Hinge)</b> <i>(Collagenase-3)</i>
<b>Catalog Number:</b>	AS-54406
<b>Lot Number:</b>	See label on vial
<b>Product Description:</b>	This polyclonal antibody is supplied as an epitope affinity purified rabbit IgG, 50 µg in 250 µl of 1X PBS (pH 7.4) containing 0.05% sodium azide.
<b>Immunogen:</b>	Rabbit anti-MMP-13 (Hinge) polyclonal antibody was raised against a synthetic collagenase-3 peptide derived from the hinge region of human MMP-13.
<b>Species Reactivity:</b>	Species reactivity includes human and mouse, while others are not tested.
<b>Application Notes:</b>	The following concentration ranges are recommended starting points for this product. Optimal working concentrations should be determined by the investigator for specific applications.

ELISA for immunizing peptide:	1: 5,000-20,000
Western blot:	1: 500-1,000
Immunohistochemistry:	1:100-200
Immunoprecipitation*:	2-5 µg/10 <sup>7</sup> cell extract
(*Not determined)	



**Figure 1** Human recombinant MMP-13 protein was probed with rabbit anti-human MMP-13 (Hinge) (Cat# 54406) polyclonal antibody.



**Figure 2** Immunohistochemistry of human malignant melanoma (Formalin fixed / Paraffin-embedded) stained with rabbit anti-MMP-13 (Hinge) (Cat# 54406) polyclonal antibody.

**Background:**

The matrix metalloproteinases (MMPs) constitute a family of zinc-dependent endopeptidases that function within the extracellular matrix. These enzymes are responsible for the breakdown of connective tissues and are important in bone remodeling, menstrual cycle and the repair of tissue damage. MMP-13 (collagenase-3) is a member of the MMP family of extracellular proteases (1, 2). Targets of MMP-13 include collagen, gelatin, aggrecan, plasminogen and CXCL12. MMP-13 is secreted as a 60-kDa proenzyme (as measured by SDS-PAGE), and activated by cleavage to a mature 48-kDa MMP-13. MMP-13 is an important target for inhibitor screening due to its involvement in diseases such as cancer and arthritis.

**References:**

1. Freije, JM. et al. (1994) *J. Biol. Chem.* 269, 16766.
2. Verma RP. and Hansch C. (2007) *Bioorganic and Medicinal Chemistry* 15, 2223-2268.

**Storage:**

Store at 2-8 °C for up to one year. Avoid repeated freezing and thawing.

This product is for *in vitro* research use only.