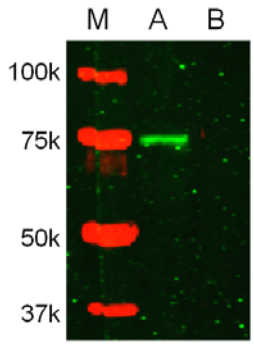
Product Data Sheet

Product Name:	Anti-MMP-2 (CT)
Catalog Number:	29575
Lot Number:	See label on vial
Product Description:	This rabbit polyclonal antibody is supplied as an epitope-affinity purified rabbit IgG 50 μg in 250 μl (0.2 mg/ml) of 1x PBS (pH 7.4) containing 0.05% sodium azide.
Immunogen:	A synthetic peptide derived from the C-terminal region of human MMP-2 protein (GenBank accession # NP_004521.1). This sequence is also found in rat and mouse MMP-2 protein.
Species Reactivity:	The species reactivity includes human, rat, and mouse. The reactivity of anti-MMP-2 (CT) was confirmed by ELISA and dot blot. The specificity was confirmed by western blot analysis of human recombinant MMP-2.
Application Notes:	The following concentration ranges are recommended starting points for this product. The investigator should determine the optimal working concentrations for specific applications.

ELISA for immunizing peptide:	1:5,000-20,000
Western Blot:	1: 500-1,000
Immunohistochemistry*:	1: 200

(* Recommended but not yet tested)



Western blot analysis of human recombinant MMP-2 with the anti-MMP-2 (CT) antibody (cat. # 29575). protein band was detected at ~72 kDa (A); the band was blocked by the immunizing peptide (B).). Hilyte fluor™ 750 –conjugated secondary antibody was used and the signals were detected with an infrared-imaging system (Odyssey, Li-Cor, Inc.).

Background: Matrix metalloproteinases (MMPs), also called matrixins, belong to a family of proteases that are essential for the breakdown of extracellular matrix (ECM). They are thus important in apoptosis, tumor cell growth, invasion, and metastasis; as well as angiogenesis and wound healing (1-3). Most of the MMPs contain common domain structures that include a signal sequence, a propeptide, a catalytic domain, and a hemopexin-like (Hpx) domain (4). MMP-2 and MMP-9, the two gelatinases, contain three additional repeats of a fibronectin type II-like domain, enabling them to bind to and break down collagens (4).

Storage: Store at 2-8 °C for up to 12 months. Avoid repeated freezing and thawing.

Compatible Secondary Antibodies:

Catalog #	**Goat anti-Rabbit IgG (H+L)**
28176	Unconjugated
28176-AMCA	AMCA Labeled
28176-FAM	FAM Labeled
28176-FITC	FITC Labeled
28176-TAMRA	TAMRA Labeled
28176-H488	HiLyte Fluor™ 488 Labeled
28176-H555	HiLyte Fluor™ 555 Labeled
28176-H594	HiLyte Fluor™ 594 Labeled
28176-H647	HiLyte Fluor™ 647 Labeled
28176-H680	HiLyte Fluor™ 680 Labeled
28176-H750	HiLyte Fluor™ 750 Labeled
61056-H488	Highly Cross-adsorbed, HiLyte Fluor™ 488 Labeled
61056-H555	Highly Cross-adsorbed, HiLyte Fluor™ 555 Labeled
61056-H594	Highly Cross-adsorbed, HiLyte Fluor™ 594 Labeled
61056-H647	Highly Cross-adsorbed, HiLyte Fluor™ 647 Labeled
61056-H680	Highly Cross-adsorbed, HiLyte Fluor™ 680 Labeled
61056-H750	Highly Cross-adsorbed, HiLyte Fluor™ 750 Labeled
28177	Highly Cross-adsorbed, HRP Labeled
28178	Highly Cross-adsorbed, AP Labeled
28179	Highly Cross-adsorbed, Biotin Labeled

References:

1. Woessner, J. et al. *FASEB J* **5**, 2145 (1991).
2. Ito, A. et al. *J Biol Chem* **271**, 14657(1996).
3. Fowlkes, J. et al. *J Biol Chem* **270**, 27481 (1995).
4. Itoh, Y. et al. *Essays in Biochemistry* **38**, 21 (2002).

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