



20150116ML

# Anti-Human MMP-7 (#4C21)

**FOR RESEARCH ONLY! NOT FOR HUMAN USE!**

<b>Cat.-no.:</b>	<b>101-M111</b>
Size:	100 µg
Lot. No.:	According to product label

**Preparation:** This antibody was produced from a hybridoma (mouse myeloma fused with spleen cells from a mouse) immunized with purified human recombinant human MMP-7. The IgG2 fraction of the tissue culture supernatant was purified by Protein G affinity chromatography.

## Target Background

<b>Synonyms (Target):</b>	MMP7; MMP-7; MPSL1; PUMP-1
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Matrix metalloproteinases (MMPs) are a family of zinc and calcium dependent endopeptidases with the combined ability to degrade all the components of the extracellular matrix. MMP7 (matrilysin) is expressed in epithelial cells of normal and diseased tissues, and is capable of digesting a large series of proteins of the extracellular matrix including collagen IV and X, gelatin, casein, laminin, aggrecan, entactin, elastin and versican. MMP7 is implicated in the activation of other proteinases such as plasminogen, MMP1, MMP2, and MMP9. In addition to its roles in connective tissue remodeling and cancer, MMP7 also regulates intestinal  $\alpha$ -defensin activation in innate host defense, releases tumor necrosis factor $\alpha$  in a model of herniated disc resorption, and cleaves FasL to generate a soluble form in a model of prostate involution. Structurally, MMP7 is the smallest of the MMPs and consists of two domains: a prodomain that is cleaved upon activation and a catalytic domain containing the zincbinding site.

## Database References Target

<b>Protein RefSeq:</b>	NP_002414.1
<b>Uniprot ID:</b>	P09237
<b>mRNA RefSeq:</b>	NM_002423.3

## Product Specifications

<b>Host</b>	Mouse
<b>Reactivity against</b>	Human
<b>Clonality</b>	Monoclonal Antibody
<b>Clone</b>	(#4C21)
<b>Isotype</b>	IgG2
<b>Purification</b>	Protein G chromatography
<b>Antigen</b>	recombinant human MMP-7
<b>Formulation</b>	lyophilized
<b>Reconstitution buffer</b>	PBS (sterile)

**Reconstitution:** Reconstitute the antibody with 200 µl sterile PBS and the final concentration is 500 µg/ml.

**Stability:** Lyophilized samples are stable for 2 years from date of receipt when stored at -70°C. Reconstituted antibody can be aliquoted and stored frozen at < -20 °C for at least for six months without detectable loss of activity.

**Remarks:** This antibody recognizes human MMP-7 in western blot without cross reactivity with other human MMPs. Reactivity to MMP-7 of other species is not tested.

**AVOID REPEATED FREEZE AND THAW CYCLES!**

## Applications

The antibody can be used within the following applications:

WB, IHC (P)

### Recommended usage:

WB: Use at 1:200-2000;

IHC: 1:50-200

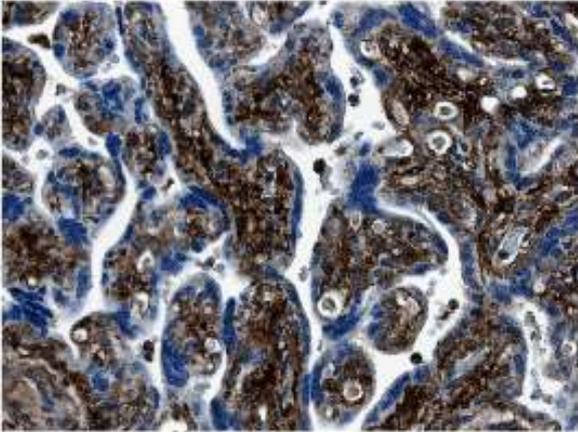
**NOTE: OPTIMAL DILUTIONS SHOULD BE DETERMINED BY EACH LABORATORY FOR EACH APPLICATION!**



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### Application/Handling



**Fig. 1:** Formalin fixed and Paraffin embedded human placenta tissue section was subjected to IHC staining using (#101-M111).