

# Anti-MMP-2 Antibody

Mouse Anti Human Monoclonal Antibody

Catalog # AP53416

## Product Information

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<b>Application</b>	WB, IF
<b>Primary Accession</b>	<a href="#">P08253</a>
<b>Other Accession</b>	<a href="#">NM_004530</a>
<b>Reactivity</b>	Human, Rat
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Isotype</b>	IgG1
<b>Immunogen</b>	Purified recombinant human MMP-2 protein expressed in E.coli.
<b>Purification</b>	Affinity purified
<b>Calculated MW</b>	73882

## Additional Information

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<b>Gene ID</b>	4313
<b>Other Names</b>	72 kDa gelatinase;72kD type IV collagenase;CLG 4;CLG 4A;CLG4;CLG4A;Collagenase Type 4 alpha;Collagenase type IV A;Gelatinase A;Gelatinase alpha;Gelatinase neutrophil;Matrix metalloproteinase 2 gelatinase A 72kDa gelatinase 72kDa type IV collagenase;Matrix metalloproteinase 2 (gelatinase A, 72kDa gelatinase, 72kDa type IV collagenase);Matrix Metalloproteinase 2;Matrix metalloproteinase II;Matrix metalloproteinase-2;MMP 2;MMP II;MMP-2;MMP2;MMP2_HUMAN;MONA;Neutrophil gelatinase;PEX;TBE 1;TBE-1.
<b>Dilution</b>	WB~~1:1000 IF~~1:50~200
<b>Format</b>	PBS(pH 7.4) containing with 0.09% (W/V) sodium azide and 50% glycerol.
<b>Storage</b>	Store at -20 °C.Stable for 12 months from date of receipt

## Protein Information

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<b>Name</b>	MMP2
<b>Synonyms</b>	CLG4A
<b>Function</b>	Ubiquitous metalloproteinase that is involved in diverse functions such as remodeling of the vasculature, angiogenesis, tissue repair, tumor invasion, inflammation, and atherosclerotic plaque rupture. As well as degrading extracellular matrix proteins, can also act on several nonmatrix proteins such

as big endothelial 1 and beta- type CGRP promoting vasoconstriction. Also cleaves KISS at a Gly-|-Leu bond. Appears to have a role in myocardial cell death pathways. Contributes to myocardial oxidative stress by regulating the activity of GSK3beta. Cleaves GSK3beta in vitro. Involved in the formation of the fibrovascular tissues in association with MMP14. [Isoform 2]: Mediates the proteolysis of CHUK/IKKA and initiates a primary innate immune response by inducing mitochondrial- nuclear stress signaling with activation of the pro-inflammatory NF- kappaB, NFAT and IRF transcriptional pathways.

## Cellular Location

[Isoform 1]: Secreted, extracellular space, extracellular matrix. Membrane. Nucleus Note=Colocalizes with integrin alphaV/beta3 at the membrane surface in angiogenic blood vessels and melanomas. Found in mitochondria, along microfibrils, and in nuclei of cardiomyocytes

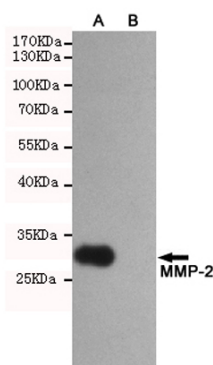
## Tissue Location

Produced by normal skin fibroblasts. PEX is expressed in a number of tumors including gliomas, breast and prostate

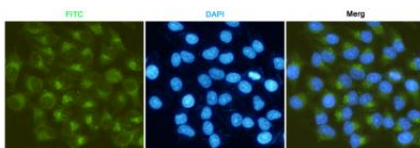
## Background

Ubiquitinous metalloproteinase that is involved in diverse functions such as remodeling of the vasculature, angiogenesis, tissue repair, tumor invasion, inflammation, and atherosclerotic plaque rupture. As well as degrading extracellular matrix proteins,

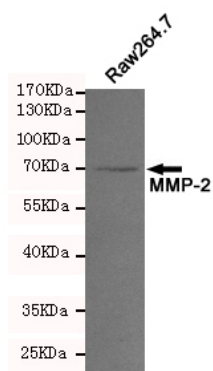
## Images



Western blot analysis of extracts from CHO-K1 (B) and CHO-K1 transfected by MMP-2 fragment(A) cell lysates using MMP-2 mouse mAb (1:2000 diluted). Predicted band size:30KDa. Observed band size:30KDa.



Immunofluorescent analysis of Hela cells fixed by anhydrous methanol at -20°C and using MMP-2 mouse mAb (dilution 1:50). DAPI was used to stain nucleus (blue).



Western blot analysis of extracts from Raw264.7 cell lysates using MMP-2 mouse mAb (1:200 diluted). Predicted band size:64,72KDa. Observed band size:72KDa.

## Citations

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- [Circ\\_0046599 Promotes the Development of Hepatocellular Carcinoma by Regulating the miR-1258/RPN2 Network](#)

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