

MMP2 Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP51352

Specification

MMP2 Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW WB, ICC, IHC-P, E <u>P08253</u> Human, Mouse, Rat Rabbit Polyclonal 72 KDa

MMP2 Antibody - Additional Information

Gene ID 4313

Other Names 72 kDa type IV collagenase, 72 kDa gelatinase, Gelatinase A, Matrix metalloproteinase-2, MMP-2, TBE-1, PEX, MMP2, CLG4A

Target/Specificity KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human MMP2. The exact sequence is proprietary.

Dilution WB~~1:1000 ICC~~N/A IHC-P~~N/A E~~N/A

Format 0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

Storage Store at -20 °C.Stable for 12 months from date of receipt

MMP2 Antibody - Protein Information

Name MMP2

Synonyms CLG4A

Function

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, 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

MMP2 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

MMP2 Antibody - Images

MMP2 Antibody - 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, 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. 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.

MMP2 Antibody - References

Huhtala P.,et al.J. Biol. Chem. 265:11077-11082(1990). Collier I.E.,et al.Genomics 9:429-434(1991). Ota T.,et al.Nat. Genet. 36:40-45(2004). Martin J.,et al.Nature 432:988-994(2004). Huhtala P.,et al.Genomics 6:554-559(1990).

MMP2 Antibody - Citations

• <u>Nkx2-5 Is Expressed in Atherosclerotic Plaques and Attenuates Development of</u> <u>Atherosclerosis in Apolipoprotein E-Deficient Mice.</u>