

MMP2 mouse Monoclonal Antibody(1H1)

Catalog # AP63776

Product Information

| | |
|--------------------------|------------------------|
| Application | WB, IHC-P, IF, ICC |
| Primary Accession | P08253 |
| Reactivity | Human, Rat, Mouse |
| Host | Mouse |
| Clonality | Monoclonal |
| Calculated MW | 73882 |

Additional Information

| | |
|---------------------------|---|
| Gene ID | 4313 |
| Other Names | MMP2 |
| Dilution | WB~~1:1000 IHC-P~~IHC 1:100-200 IF~~1:50~200 ICC~~N/A |
| Format | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide. |
| Storage Conditions | -20°C |

Protein Information

| | |
|--------------------------|---|
| Name | MMP2 |
| Synonyms | CLG4A |
| Function | 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 |

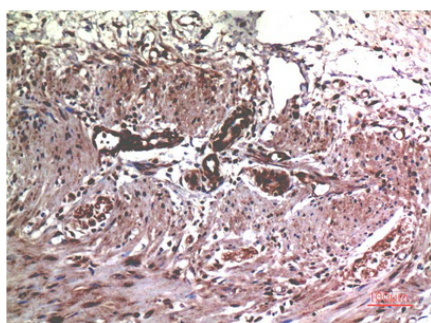
Tissue Location

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

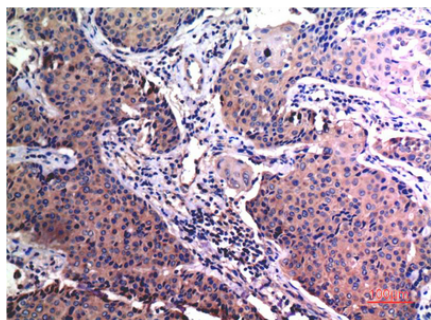
Background

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.

Images



Immunohistochemical analysis of paraffin-embedded Human Colon Carcinoma Tissue using MMP2 Mouse mAb diluted at 1:200.



Immunohistochemical analysis of paraffin-embedded Human Breast Carcinoma Tissue using MMP2 Mouse mAb diluted at 1:200.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.