

MMP-2 Antibody

Catalog # ABV11606

Specification

MMP-2 Antibody - Product Information

Application WB
Primary Accession P08253
Host Rabbit
Clonality Polyclonal
Calculated MW 73882

MMP-2 Antibody - Additional Information

Gene ID 4313

Other Names

72 kDa type IV collagenase, 3.4.24.24, 72 kDa gelatinase, Gelatinase A, Matrix metalloproteinase-2, MMP-2, TBE-1, PEX, MMP2, CLG4A

Target/Specificity

MMP-2

Formulation

 $100 \mu g$ (0.5 mg/ml) affinity purified rabbit anti-human MMP-2 polyclonal antibody in phosphate buffered saline (PBS), pH 7.2, containing 30% glycerol, 0.5% BSA, 0.01% thimerosal.

Handling

The antibody solution should be gently mixed before use.

Background Descriptions

Precautions

MMP-2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

MMP-2 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.



Tel: 858.875.1900 Fax: 858.875.1999

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 NFkappaB, 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

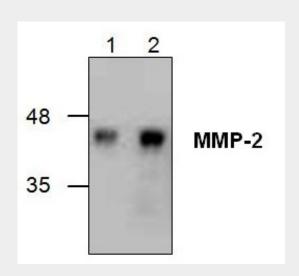
Produced by normal skin fibroblasts. PEX is expressed in a number of tumors including gliomas, breast and prostate

MMP-2 Antibody - Protocols

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

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

MMP-2 Antibody - Images



Western blot analysis using recombinat human MMP-2. Lane1: 100ng; Lane2: 200ng.

MMP-2 Antibody - Background

The mammalian Matrix metalloproteinases (MMPs) degrade extracellular matrix in physiological and pathological processes. After cleavage of a single peptide domain of about 20 amino acids, the MMPs are secreted in latent forms. Upon activation, the N-terminal propeptide domain is cleaved to generate the active forms of MMP. MMP-2 (72 kDa type IV collagenase, Gelatinase-A) contains the basic structure of propeptide, catalytic, and hemopexin domains. It is an important proteinase in tissue remodeling.