abcam

Product datasheet

Anti-MMP2 antibody ab97779

★★★★★ <u>5 Abreviews</u> <u>166 References</u> 5 图像

概述

产品名称 Anti-MMP2抗体

描述 兔多克隆抗体to MMP2

宿主 Rabbit

经测试应用 适用于: IHC-P, IP, ICC/IF, WB

种属反应性 与反应: Human

预测**可用于:** Rat, Sheep, Rabbit, Cow, Pig, Xenopus laevis ▲

免疫原 Recombinant protein fragment corresponding to a region within amino acids 193 and 545 of

Human MMP2 (NP_004521).

阳性对照 293T, A431, H1299, HeLa, HepG2, MOLT4 or Raji cell lysate; U-87 MG whole cell extracts. PC-3,

mouse brain.

常规说明

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

性能

形式 Liquid

存放说明 Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw

cycles.

存储溶液 pH: 7.00

Preservative: 0.025% Proclin 300

Constituents: 78% PBS, 1% BSA, 20% Glycerol (glycerin, glycerine)

纯**度** Immunogen affinity purified

克隆 多克隆

同种型 IgG

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The Abpromise guarantee

Abpromise™承诺保证使用ab97779于以下的经测试应用

"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
IHC-P	*** <u>*</u> (2)	1/100 - 1/1000.
IP		1/100 - 1/500.
ICC/IF		1/100 - 1/1000.
WB	★★★☆☆(2)	1/500 - 1/3000. Predicted molecular weight: 74 kDa.

靶标

功能

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.

PEX, the C-terminal non-catalytic fragment of MMP2, posseses anti-angiogenic and anti-tumor properties and inhibits cell migration and cell adhesion to FGF2 and vitronectin. Ligand for integriny/beta3 on the surface of blood vessels.

组织特异性

疾病相关

序列相似性

结构域

翻译后修饰

细胞定位

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

Defects in MMP2 are the cause of Torg-Winchester syndrome (TWS) [MIM:259600]; also known as multicentric osteolysis nodulosis and arthropathy (MONA). TWS is an autosomal recessive osteolysis syndrome. It is severe with generalized osteolysis and osteopenia. Subcutaneous nodules are usually absent. Torg-Winchester syndrome has been associated with a number of additional features including coarse face, corneal opacities, patches of thickened, hyperpigmented skin, hypertrichosis and gum hypertrophy. However, these features are not always present and have occasionally been observed in other osteolysis syndromes.

Belongs to the peptidase M10A family. Contains 3 fibronectin type-II domains.

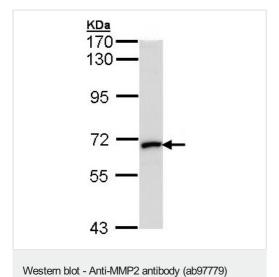
Contains 4 hemopexin-like domains.

The conserved cysteine present in the cysteine-switch motif binds the catalytic zinc ion, thus inhibiting the enzyme. The dissociation of the cysteine from the zinc ion upon the activation-peptide release activates the enzyme.

Phosphorylation on multiple sites modulates enzymatic activity. Phosphorylated by PKC in vitro. The propeptide is processed by MMP14 (MT-MMP1) and MMP16 (MT-MMP3). Autocatalytic cleavage in the C-terminal produces the anti-angiogenic peptide, PEX. This processing appears to be facilitated by binding integriny/beta3.

Secreted > extracellular space > extracellular matrix. Membrane. Nucleus. 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.

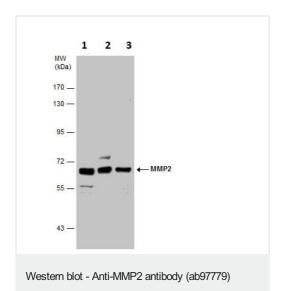
图片



Anti-MMP2 antibody (ab97779) at 1/1000 dilution + HepG2 whole cell lysate at 30 μg

Predicted band size: 74 kDa

7.5% SDS Page

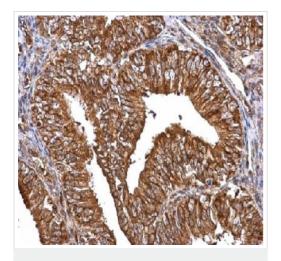


All lanes: Anti-MMP2 antibody (ab97779) at 1/3000 dilution

Lane 1: PC-3 Lane 2: U-87 MG Lane 3: SK-N-SH

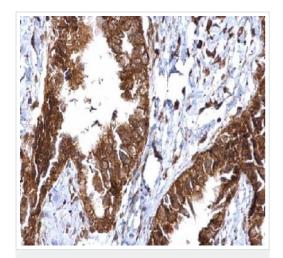
Lysates/proteins at 30 µg per lane.

Predicted band size: 74 kDa



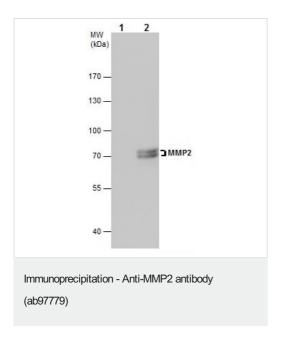
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-MMP2 antibody (ab97779)

Immunohistochemical analysis of Human endometrical carcinoma labeling MMP2 with ab97779 at 1/500 dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-MMP2 antibody (ab97779)

Immunohistochemical analysis of paraffin-embedded Human ovarian carcinoma tissue labeling MMP2 with ab97779 at 1/500 dilution.



MMP2 was immunoprecipitated from U-87 MG (glioblastoma-astrocytoma epithelial cell line) whole cell extracts with 5 μ g ab97779. Western blot was performed from the immunoprecipitate using ab97779.

Lane 1: Control IgG IP in U-87 MG whole cell extracts.

Lane 2: ab97779 IP in U-87 MG whole cell extracts.

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