基质金属蛋白酶 9 抗体

产品货号： mlR4593

英文名称： MMP9

中文名称： 基质金属蛋白酶 9 抗体

别　　名： Matrix metalloproteinase-9 precursor; MMP-9; MMP9; MMP 9; 92 kDa type IV; Collagenase; 92 kDa gelatinase; Gelatinase B; GELB; MMP9_HUMAN; 82 kDa matrix metalloproteinase-9; 92 kDa type IV collagenase; CLG 4B; CLG-4B; CLG4B; Collagenase Type 4 beta; Collagenase Type-4 beta; Collagenase type IV 92 KD; Collagenase type IV 92 KD; EC 3.4.24.35; Gelatinase 92 KD; Gelatinase 92 KD; Gelatinase beta; Gelatinase-beta; GelatinaseB; GELB; Macrophage gelatinase; MANDP2; Matrix metallopeptidase 9 (gelatinase B, 92kDa gelatinase, 92kDa type IV collagenase); Matrix Metalloproteinase 9; Type V collagenase.

研究领域： 肿瘤　细胞生物　免疫学　神经生物学　信号转导　转录调节因子　合成与降解

抗体来源： Rabbit

克隆类型： Polyclonal

交叉反应： Human, Mouse, Rat, Chicken, Dog, Pig, Horse, Rabbit, Sheep,

产品应用： WB=1:500-2000 ELISA=1:500-1000 IHC-P=1:400-800 IHC-F=1:400-800 IF=1:100-500 （石蜡切片需

做抗原修复）

not yet tested in other applications.

optimal dilutions/concentrations should be determined by the end user.

分 子 量： 78kDa

细胞定位： 细胞外基质 分泌型蛋白

性　　状： Lyophilized or Liquid

浓　　度： 1mg/ml

免 疫 原： KLH conjugated synthetic peptide derived from human MMP9:151-250/707

亚　　型： IgG

纯化方法： affinity purified by Protein A

储 存 液： 0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.

保存条件： Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

PubMed : PubMed

产品介绍 : All cells within tissues are surrounded by an extracellular matrix (ECM) giving the tissues shape and structure. The ECM is constantly being remodeled and constant communication is maintained between cells through this matrix. Secreted proteins, termed matrix metalloproteinases (MMPs), are involved in the modulation of cell matrix interactions. MMPs are Zn(2+) binding endopeptidases that degrade various components of the ECM. MMPs are enzymes implicated in normal and pathologic tissue remodeling processes, wound healing, angiogenesis, and tumor invasion. These enzymes are very potent when active, and are associated with extracellular space inhibitors called TIMPs (tissue inhibitors of matrix metalloproteinases). TIMPs have been shown to block tumor cell invasion suggesting that they act as metastasis suppressor genes.

Function:

May play an essential role in local proteolysis of the extracellular matrix and in leukocyte migration. Could play a role in bone osteoclastic resorption. Cleaves KiSS1 at a Gly-|-Leu bond. Cleaves type IV and type V collagen into large C-terminal three quarter fragments and shorter N-terminal one quarter fragments. Degrades fibronectin but not laminin or Pz-peptide.

Subunit:

Exists as monomer or homodimer; disulfide-linked. Exists also as heterodimer with a 25 kDa protein. Macrophages and transformed cell lines produce only the monomeric form. Interacts with ECM1.

Subcellular Location:

Secreted, extracellular space, extracellular

Tissue Specificity:

Produced by normal alveolar macrophages and granulocytes.

Post-translational modifications:

Processing of the precursor yields different active forms of 64, 67 and 82 kDa. Sequentially processing by MMP3 yields the 82 kDa matrix metalloproteinase-9.

N- and O-glycosylated.

DISEASE:

Defects in MMP9 may be a cause of susceptibility to intervertebral disc disease (IDD) [MIM:603932]; also known as lumbar disk herniation (LDH). IDD is one of the most common musculo-skeletal disorders and the predominant cause of low-back pain and unilateral leg pain.

Defects in MMP9 are the cause of metaphyseal anadysplasia type 2 (MANDP2) [MIM:613073]. Metaphyseal anadysplasia consists of an abnormal bone development characterized by severe skeletal changes that, in contrast with the progressive course of most other skeletal dysplasias, resolve spontaneously with age. Clinical characteristics are evident from the first months of life and include slight shortness of stature and a mild varus deformity of the legs. Patients attain a normal stature in adolescence and show improvement or complete resolution of varus deformity of the legs and rhizomelic micromelia.

Similarity:

Belongs to the peptidase M10A family.

SWISS:

P14780

Gene ID:

4318

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

MMP9 亦称 IV 型胶原酶或明胶酶 B，其主要功能为降解 IV 型胶原。因而它在肿瘤细胞突破基底膜屏障和浸润转移中起重要作用。目前主要用于各种恶性肿瘤(如乳腺癌、胃肠道癌、卵巢癌、膀胱癌等)中的基底膜检测与转移浸润的研究。细胞外基质在维持正常组织结构与功能以及细胞生长和分化过程中起重要作用。细胞外基质动态平衡的失调与肿瘤细胞侵袭、转移和复发密切相关，基质金属蛋白酶(MMP9)是细胞外基质的降解酶，可降解Ⅳ、Ⅴ、Ⅸ、Ⅺ型胶原，在肿瘤的浸润、转移过程中起重要作用，近年为肿瘤研究的热点。

产品图片