基质金属蛋白酶-16 抗体

产品货号： mlR1856

英文名称： MMP16

中文名称： 基质金属蛋白酶-16 抗体

别　　名： Matrix metalloproteinase-16;MMP16; Matrix metallopeptidase 16 membrane inserted; Matrix metalloproteinase 16; Membrane type 3 matrix metalloproteinase; Membrane type matrix metalloproteinase 3; MMP 16; MMP-16; MMP16; MMP X2; MMPX2; MT MMP2; MT MMP3; MT3 MMP; MT3MMP; MTMMP2; MTMMP3; MMP16_HUMAN.

研究领域： 肿瘤　细胞生物　免疫学　信号转导　细胞凋亡

抗体来源： Rabbit

克隆类型： Polyclonal

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

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： 56kDa

细胞定位： 细胞膜 细胞外基质

性　　状： Lyophilized or Liquid

浓　　度： 1mg/ml

免 疫 原： KLH conjugated synthetic peptide derived from human MMP-16:501-607/607 <Extracellular>

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： The matrix metalloproteinases (MMPs) are a family of at least eighteen secreted and membrane bound zinc endopeptidases. Collectively, these enzymes can degrade all the components of the extracellular matrix, including fibrillar and non fibrillar collagens, fibronectin, laminin and basement membrane glycoproteins. In general, a signal peptide, a propeptide, and a catalytic domain containing the highly conserved zinc binding site characterizes the structure of the MMPs. In addition, fibronectin like repeats, a hinge region, and a C terminal hemopexin like domain allow categorization of MMPs into the collagenase, gelatinase, stomelysin and membrane type MMP subfamilies. All MMPs are synthesized as proenzymes, and most of them are secreted from the cells as proenzymes. Thus, the activation of these proenzymes is a critical step that leads to extracellular matrix breakdown. MMPs are considered to play an important role in wound healing, apoptosis, bone elongation, embryo development, uterine involution, angiogenesis and tissue remodeling, and in diseases such as multiple sclerosis, Alzheimer's, malignant gliomas, lupus, arthritis, periodontis, glumerulonephritis, atherosclerosis, tissue ulceration, and in cancer cell invasion and metastasis.

MMP16 induces the activation of pro gelatinase A (MMP2). It was identified as a membrane bound Metalloproteinase in normal and tumor cell lines. MMP16 is similar to the other MtMMPs; it contains a furin cleavage site, is membrane bound, and contains a cytoplasmic tail (MT4MMP lacks the tail, and may not be intercalated into the membrane). MMP16 is also known to be "shed" from the membrane in a soluble form. MT1MMP is known to function in activating a number of MMPs, chiefly MMP2, but that role has not been well described for the other MTMMPs. MMP16 has been reported to be elevated in several tumor cell lines, and is constituitively produced by some normal cell lines.

Function:

Endopeptidase that degrades various components of the extracellular matrix, such as collagen type III and fibronectin. Activates progelatinase A. Involved in the matrix remodeling of blood vessels. Isoform short cleaves fibronectin and also collagen type III, but at lower rate. It has no effect on type I, II, IV and V collagen. However, upon interaction with CSPG4, it may be involved in degradation and invasion of type I collagen by melanoma cells.

Subunit:

Interacts with CSPG4 through CSPG4 chondroitin sulfate glycosaminoglycan.

Subcellular Location:

Cell membrane; Single-pass type I membrane protein; Extracellular side.

Tissue Specificity:

Expressed in heart, brain, placenta, ovary and small intestine. Isoform Short is found in the ovary.

Post-translational modifications:

The precursor is cleaved by a furin endopeptidase (By similarity).

Similarity:

Belongs to the peptidase M10A family.

Contains 4 hemopexin-like domains.

SWISS:

P51512

Gene ID:

4325

Important Note:

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