

# Rabbit Anti-MMP-26/FITC Conjugated antibody

# SL1377R-FITC

Product Name:	Anti-MMP-26/FITC
Chinese Name:	FITC标记 <b>的基质金属蛋白</b> 酶-26 <b>抗体</b>
Alias:	MMP26_HUMAN; Endometase; Matrilysin 2; MMP26; Matrix Metalloproteinase 26;
	MMP 26.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,
Applications:	IF=1:50-200
	not yet tested in other applications.
	optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	18kDa
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human MMP26
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	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.
Product Detail:	background:
	Matrix metalloproteinase 26 preprotein; gelatinase A; 70kD type IV collagenase;
	gelatinase neutrophil. Proteins of the matrix metalloproteinase (MMP) family are
	involved in the breakdown of extracellular matrix in normal physiological processes as
	well as in disease processes. Most MMP's are secreted as inactive proproteins which are
	activated when cleaved by extracellular proteinases. MMP26 degrades type IV
	collagen, the major structural component of basement membranes. The enzyme plays a
	role in endometrial menstrual breakdown, regulation of vascularization and the
	inflammatory response.

Proteins of the matrix metalloproteinase (MMP) family are involved in the breakdown of extracellular matrix in normal physiological processes, such as embryonic development, reproduction, and tissue remodeling, as well as in disease processes, such as arthritis and metastasis. Most MMP's are secreted as inactive proproteins which are activated when cleaved by extracellular proteinases.

MMP26, also known as Matrilysin 2, was first cloned from human fetal cells, and identified as an MMP most closely related to MMP7 (Matrilysin 1). The homology between MMP7 and MMP26 is low (only 38% identical), thus the functions are unlikely to be similar. Homology is much higher (48% identical) for the comparable region of MMP12, but MMP26 appears to have broader substrate specificity than does MMP12. MMP26, like MMP7, lacks the hemopexin domain common to the other MMPs, but contains a Propertide domain, cysteine switch activation site, followed by a catalytic domain, and a short vestige of the hinge region. MMP26 is apparently not glycosylated, and is a secreted MMP. Tissue analysis shows MMP26 most strongly in placenta and uterus, but also in kidney cells, lung cells, lymphocytes and lung or endometrial carcinoma cells. MMP26 is proteolytically active, cleaving casein in zymograms, and gelatin, a1PI, fibrinogen, fibronectin, vitronectin, type IV collagen, and apparently activating MMP9. The proteolytic activity was blocked by TIMP1 and TIMP2. MMP26 does not appear to be produced by most normal quiescent cells, but treatment of many cell types with the phorbol ester TPA, or IL1 stimulates production of MMP26.

#### Function:

May hydrolyze collagen type IV, fibronectin, fibrinogen, beta-casein, type I gelatin and alpha-1 proteinase inhibitor. Is also able to activate progelatinase B.

### Subcellular Location:

Secreted, extracellular space, extracellular matrix.

## Tissue Specificity:

Expressed specifically in uterus and placenta. Is also widely expressed in malignant tumors from different sources as well as in diverse tumor cell lines.

#### Similarity:

Belongs to the peptidase M10A family.

## Database links:

Entrez Gene: 56547Human

Omim: 605470Human

SwissProt: Q3MJ78Human

SwissProt: Q9NRE1Human

Unigene: 204732Human

# Important Note:

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

MMPs与Tumour的生物学行为密切相关, MMPs高表达的Tumour, 其侵袭和转移性较强。而Tumour的侵袭和转移是衡量Tumour生物学行为的最重要的指标, 也是Tumour致命性危害的根源。

MMP26为基质溶解素主要表达在上皮起源的Tumour, 如乳腺癌、肺癌、前列腺癌及子宫内膜癌等。

