SunLong Biotech Co.,LTD
Tel: 0086-571-56623320 Fax:0086-571-56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

[Marker Primary Antibody]

Rabbit Anti-MMP16/FITC Conjugated antibody

Catalog Number: SL1856R-FITC

FOR RESEARCH USE ONLY

[DATASHEET]

Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Target:	Anti-MMP16/FITC
Immunogen:	KLH conjugated synthetic peptide derived from human MMP-16
Purification:	affinity purified by Protein A
Concentration:	1mg/ml
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 1M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
Applications:	IF=1:100-500 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Reactivity:	(predicted:Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Horse,Rabbit)
Subcellular Location:	The cell membrane
Background:	background: 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,

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

	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. **Database links:** **Entrez Gene:** 4325 Human **Entrez Gene:** 17389 Mouse **Entrez Gene:** 65205 Rat Omim: 602262 Human **SwissProt:** P51512 Human **SwissProt:** Q9WTR0 Mouse **SwissProt:** O35548 Rat **Unigene:** 492187 Human

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

SunLong Biotech Co.,LTD
Tel: 0086-571-56623320 Fax:0086-571-56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

	Unigene: 546267 Human **Unigene:** 187315 Mouse **Unigene:** 208361 Rat Important **Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.