SunLong Biotech Co.,LTD
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Rabbit Anti-MMP13 antibody

SL10581R

Product Name	MMP13
Chinese Name	基质金属蛋白酶 13 抗体
Alias	CLG 3; CLG3; Collagenase 3; Collagenase3; MMP13; MMP 13; MMP-13; Matrix Metalloproteinase 13; MMP 13; MMP13_HUMAN.
Research Area	Tumour Cardiovascular Cell biology Signal transduction Cytoskeleton Extracellular matrix
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Human, Mouse, Rat, (predicted: Rabbit,)
Applications	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500 （Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Theoretical molecular weight	52kDa
Cellular localization	Extracellular matrix Secretory protein
Form	Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human MMP13: 251-350/471
Lsotype	IgG
Purification	affinity purified by Protein A
Buffer Solution	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.
Storage	Shipped at 4℃. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Attention	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
PubMed	PubMed
Product	Proteins of the matrix metalloproteinase (MMP) family are involved in the breakdown

Detail

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. The protein encoded by this gene cleaves type II collagen more efficiently than types I and III. It may be involved in articular cartilage turnover and cartilage pathophysiology associated with osteoarthritis. The gene is part of a cluster of MMP genes which localize to chromosome 11q22.3. [provided by RefSeq, Jul 2008].

Function:
Degrades collagen type I. Does not act on gelatin or casein. Could have a role in tumoral process.

Subcellular Location:
Secreted, extracellular space, extracellular matrix (Probable).

Tissue Specificity:
Seems to be specific to breast carcinomas.

DISEASE:
Defects in MMP13 are the cause of spondyloepimetaphyseal dysplasia Missouri type (SEMD-MO) [MIM:602111]. A bone disease characterized by moderate to severe metaphyseal changes, mild epiphyseal involvement, rhizomelic shortening of the lower limbs with bowing of the femora and/or tibiae, coxa vara, genu varum and pear-shaped vertebrae in childhood. Epimetaphyseal changes improve with age. Defects in MMP13 are the cause of metaphyseal anadysplasia type 1 (MANDP1) [MIM:602111]. 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.
Contains 4 hemopexin-like domains.

SWISS:
P45452

Gene ID:
4322

Database links:

Entrez Gene: 403763 Dog

Entrez Gene: 4322 Human

Entrez Gene: 17386 Mouse

Entrez Gene: 171052 Rat

Omim: 600108 Human

SwissProt: P45452 Human

SwissProt: P33435 Mouse

SwissProt: P23097 Rat

Unigene: 2936 Human

Unigene: 5022 Mouse

Unigene: 10997 Rat

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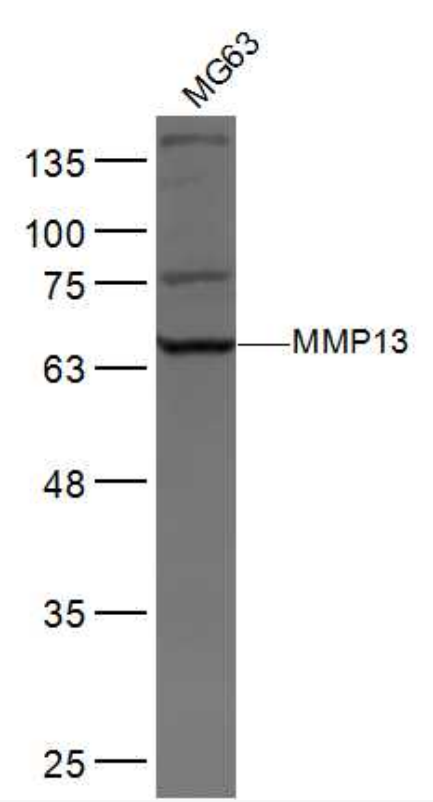
Product Picture



Sample:

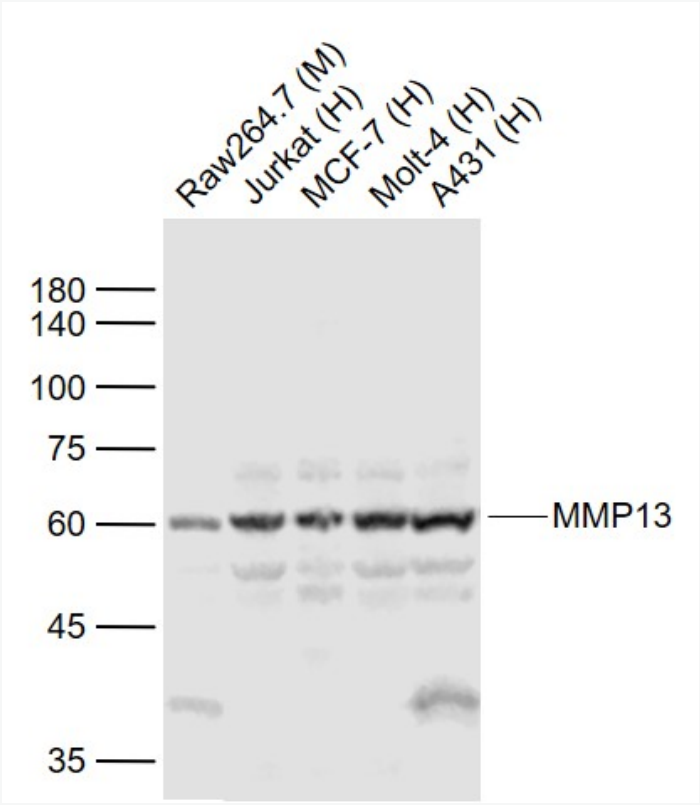
MG63(Human) Cell Lysate at 30 ug

Primary: Anti-MMP13 (SL10581R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 52 kD

Observed band size: 65 kD



Sample:

Lane 1: Raw264.7 (Mouse) Cell Lysate at 30 ug

Lane 2: Jurkat (Human) Cell Lysate at 30 ug

Lane 3: MCF-7 (Human) Cell Lysate at 30 ug

Lane 4: Molt-4 (Human) Cell Lysate at 30 ug

Lane 5: A431 (Human) Cell Lysate at 30 ug

Primary: Anti-MMP13 (SL10581RR) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 60 kD

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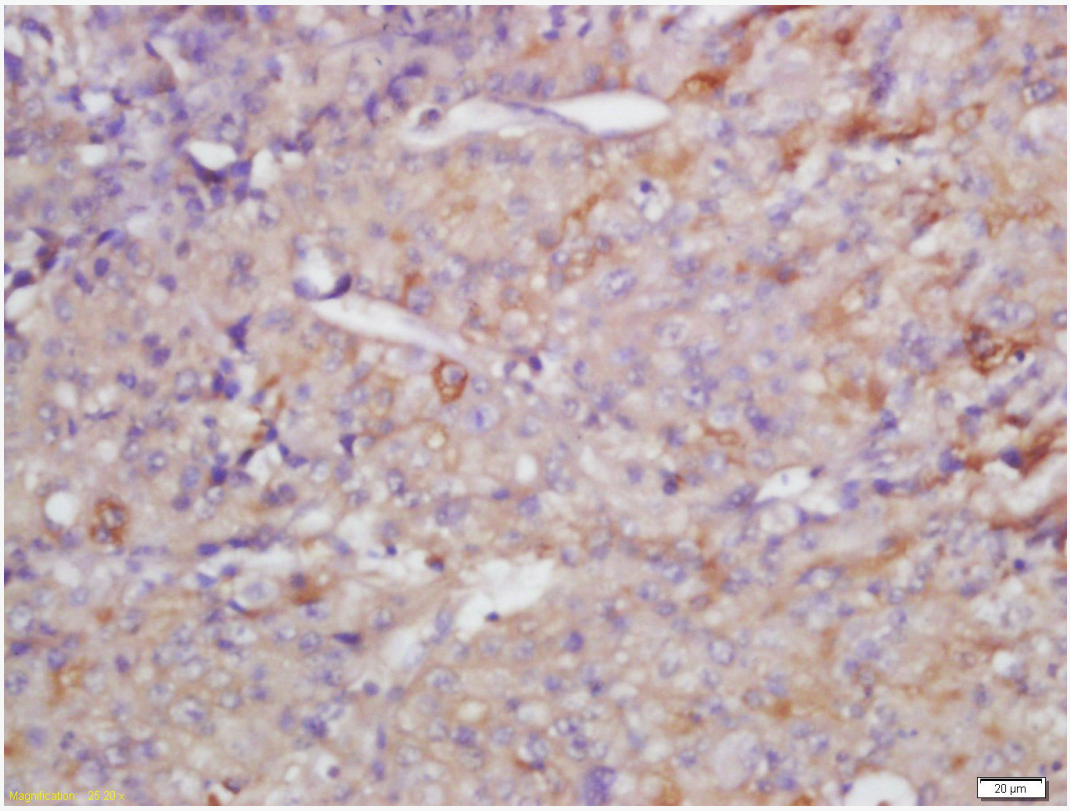
Observed band size: 60 kD



Tissue/cell: human gastric carcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (1M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-MMP-13 Polyclonal Antibody, Unconjugated(SL10581R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

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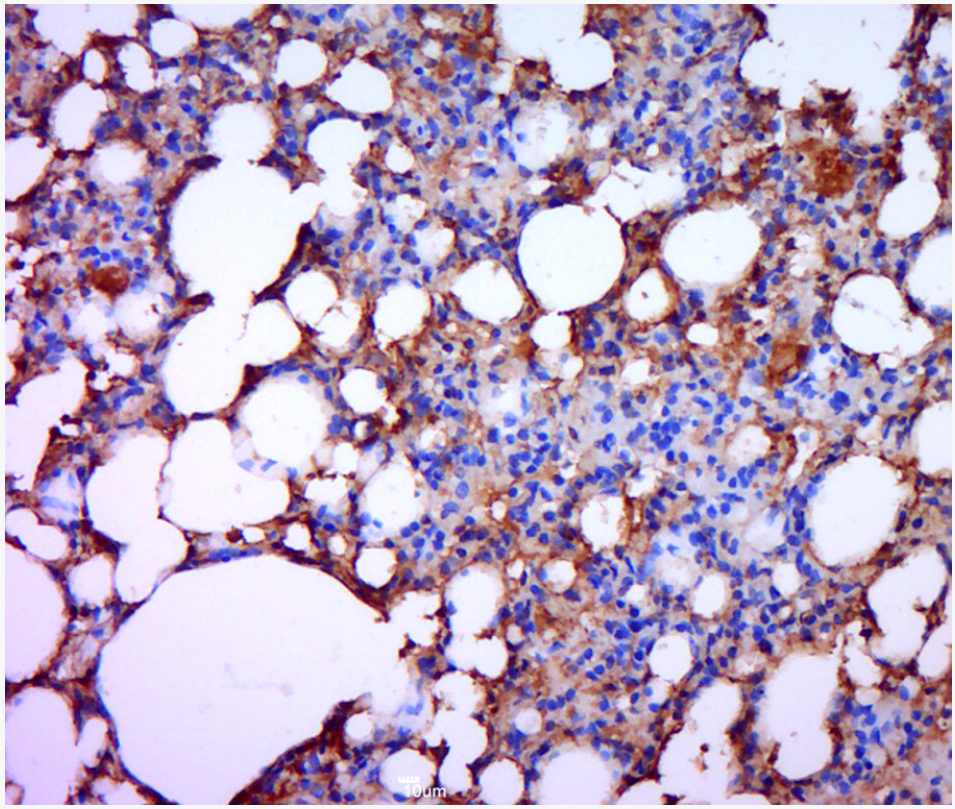

Paraformaldehyde-fixed, paraffin embedded (rat lung tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (MMP13) Polyclonal Antibody, Unconjugated (SL10581R) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.

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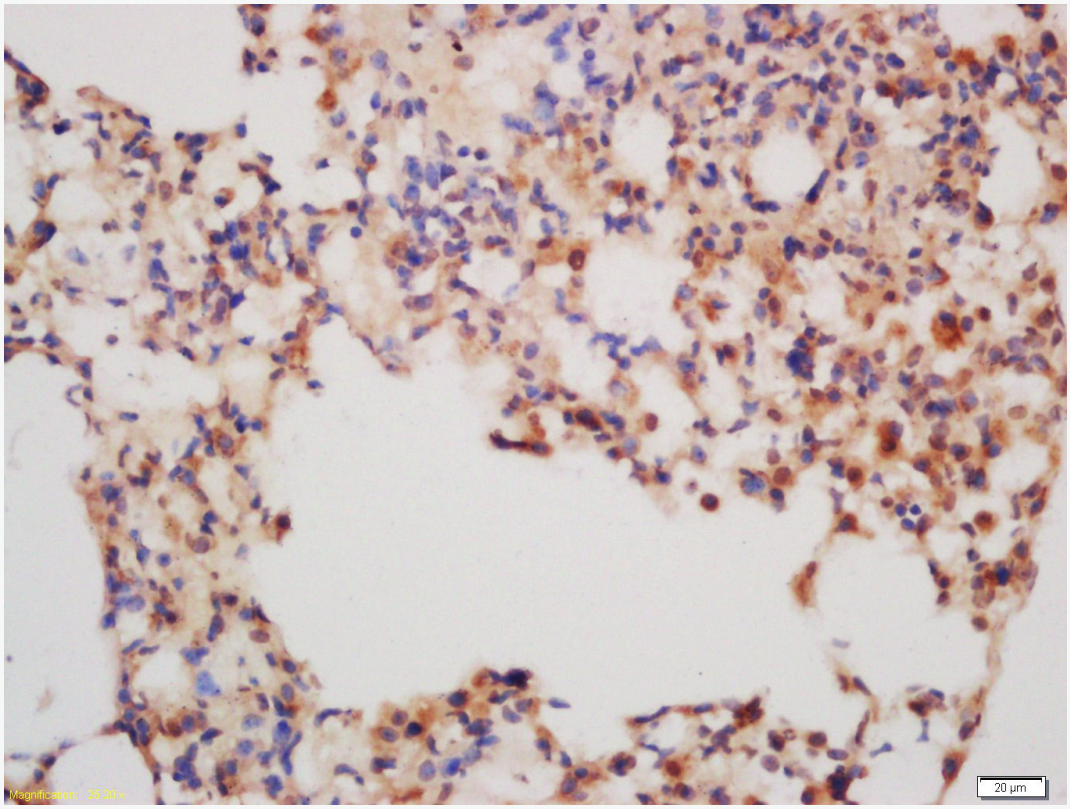

Tissue/cell: mouse lung tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (1M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min;

Incubation: Anti-MMP-13 Polyclonal Antibody, Unconjugated(SL10581R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining