

## Rabbit Anti-MMP13 antibody

SL0575R

**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 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: 201-300/471

**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°C. 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

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**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: 4322](#) Human

[Entrez Gene: 17386](#) Mouse

[Entrez Gene: 171052](#) Rat

[Entrez Gene: 403763](#) Dog

[Omim: 600108](#) Human

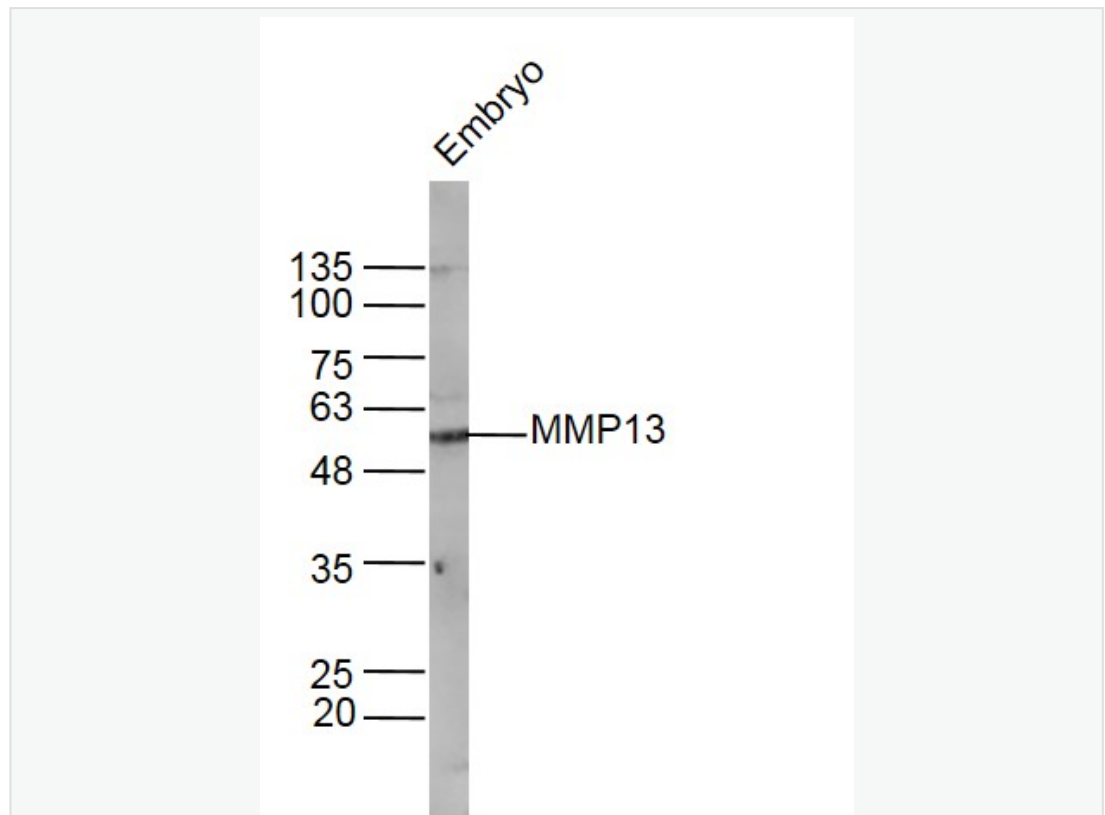
[SwissProt: P45452](#) Human

[SwissProt: P33435](#) Mouse

[SwissProt: P23097](#) Rat

MMP13 基质金属蛋白酶-13 可降解I、II、III型胶原，并对II型胶原更有效果，主要用于骨与关节病变的研究。

**Product  
Picture**



Sample:

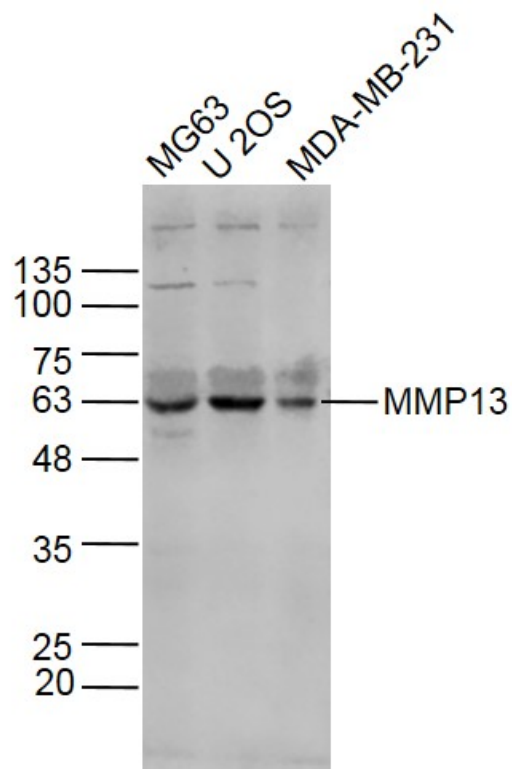
Embryo (Mouse) Lysate at 40 ug

Primary: Anti- MMP13 (SL0575R) at 1/300 dilution

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

Predicted band size: 52 kD

Observed band size: 52 kD



MG63 (Human)Lysate at 30 ug

U 2OS(Human)Lysate at 30 ug

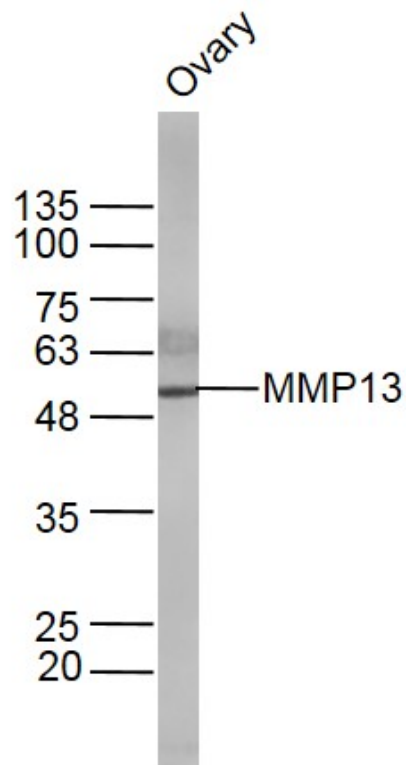
MDA-MB-231(Human)Lysate at 30 ug

Primary: Anti- MMP13 (SL0575R) at 1/300 dilution

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

Predicted band size: 52 kD

Observed band size: 60 kD



Sample:

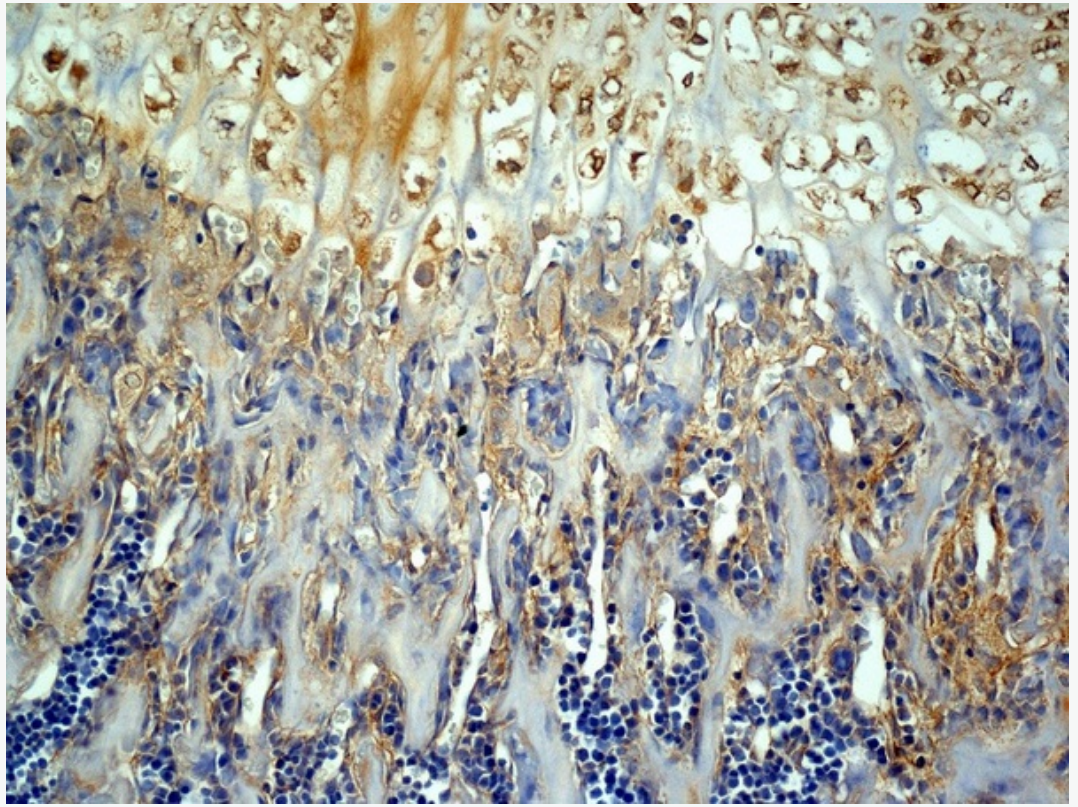
Ovary (Rat)Lysate at 40 ug

Primary: Anti- MMP13 (SL0575R) at 1/300 dilution

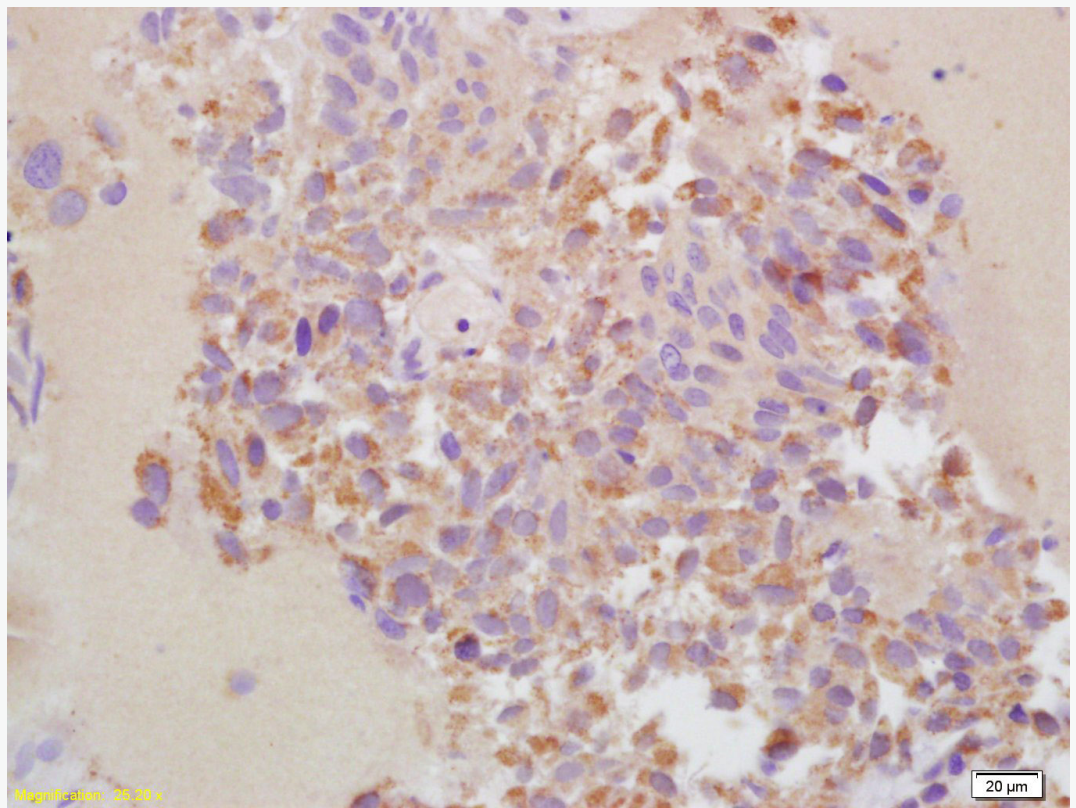
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 52 kD

Observed band size: 52 kD



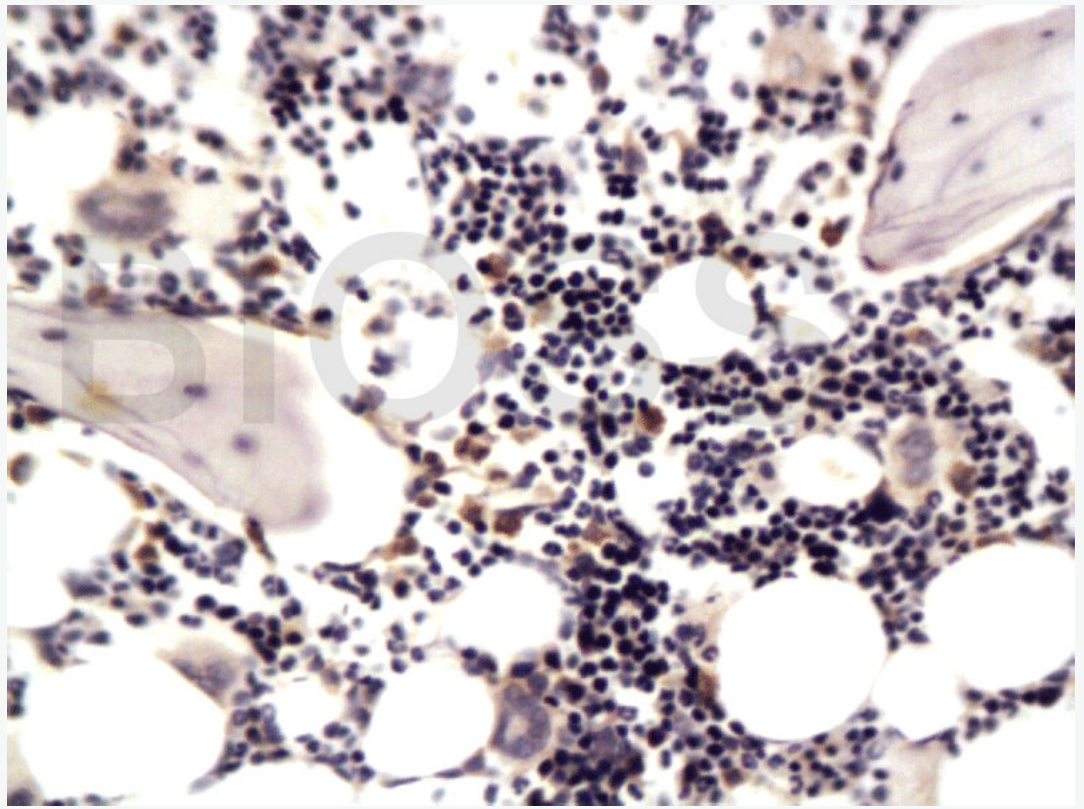
Generously provided by Markus Linder from Medical University Vienna as part of the Bioss Discovery Program. Formalin-fixed, paraffin embedded, and decalcified in EDTA mouse bone labeled with Anti-MMP-13 Polyclonal Antibody, Unconjugated (SL0575R) at 1:200 followed by conjugation to the secondary antibody and DAB staining



Tissue/cell: human bladder 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(SL0575R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Tissue/cell: rat articular cartilage; 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(SL0575R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining