ARG41636
anti-MMP13 antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes MMP13
Tested Reactivity	Ms, Rat
Tested Application	IHC-P
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	MMP13
Species	Rat
Immunogen	Recombinant protein corresponding to Y99-H335 of Rat MMP13.
Conjugation	Un-conjugated
Alternate Names	MMP13; Matrix Metallopeptidase 13; Collagenase 3; CLG3; Matrix Metalloproteinase 13 (Collagenase 3); MMP-13; Matrix Metalloproteinase-13; EC 3.4.24.35; EC 3.4.24.22; EC 3.4.24.24; EC 3.4.24.65; EC 3.4.24.; EC 3.4.24.7; EC 3.4.24; MANDP1; MDST

Application Instructions

Application table

Application	Dilution
IHC-P	1:200 - 1:1000

Application Note: IHC-P: Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Observed Size: ~ 60 kDa

Properties

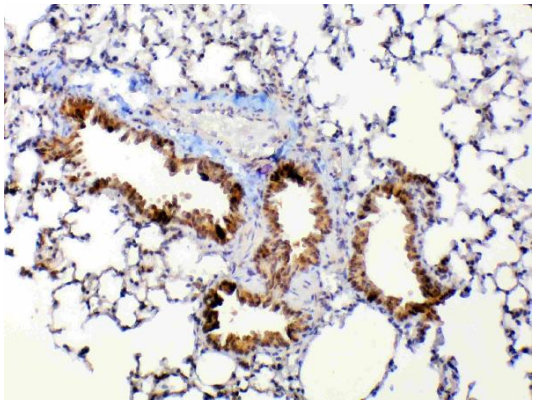
Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	0.2% Na2HPO4, 0.9% NaCl, 0.05% Sodium azide and 4% Trehalose.
Preservative	0.05% Sodium azide
Stabilizer	4% Trehalose
Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

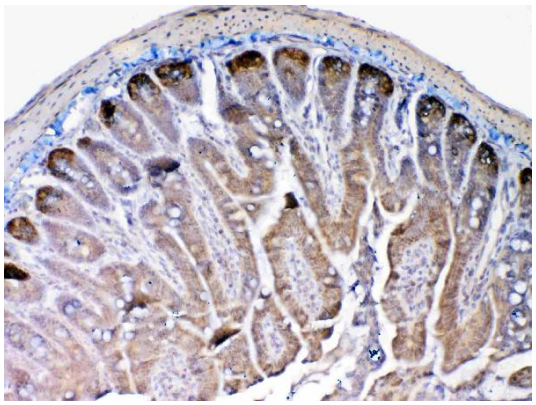
Gene Symbol	MMP13
Gene Full Name	matrix metallopeptidase 13
Background	This gene encodes a member of the peptidase M10 family of matrix metalloproteinases (MMPs). Proteins in this family are involved in the breakdown of extracellular matrix in normal physiological processes, such as embryonic development, reproduction, and tissue remodeling, as well as in disease processes, such as arthritis and metastasis. The encoded preproprotein is proteolytically processed to generate the mature protease. This protease 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. Mutations in this gene are associated with metaphyseal anadysplasia. This gene is part of a cluster of MMP genes on chromosome 11. [provided by RefSeq, Jan 2016]
Function	Plays a role in the degradation of extracellular matrix proteins including fibrillar collagen, fibronectin, TNC and ACAN. Cleaves triple helical collagens, including type I, type II and type III collagen, but has the highest activity with soluble type II collagen. Can also degrade collagen type IV, type XIV and type X. May also function by activating or degrading key regulatory proteins, such as TGFB1 and CCN2. Plays a role in wound healing, tissue remodeling, cartilage degradation, bone development, bone mineralization and ossification. Required for normal embryonic bone development and ossification. Plays a role in the healing of bone fractures via endochondral ossification. Plays a role in wound healing, probably by a mechanism that involves proteolytic activation of TGFB1 and degradation of CCN2. Plays a role in keratinocyte migration during wound healing. May play a role in cell migration and in tumor cell invasion. [UniProt]
Calculated Mw	54 kDa
PTM	Disulfide bond, Glycoprotein, Phosphoprotein, Zymogen. [UniProt]
Cellular Localization	Extracellular matrix, Secreted. [UniProt]

Images



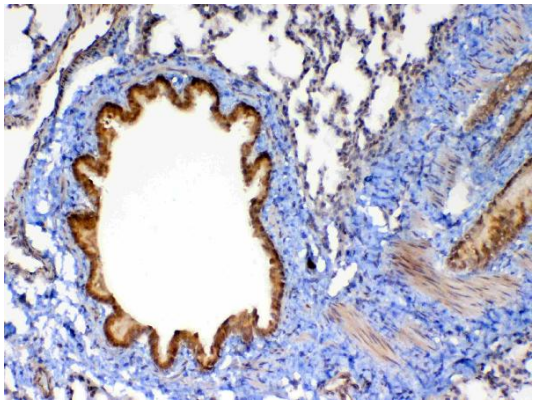
ARG41636 anti-MMP13 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Mouse lung tissue. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG41636 anti-MMP13 antibody at 1 µg/ml dilution, overnight at 4°C.



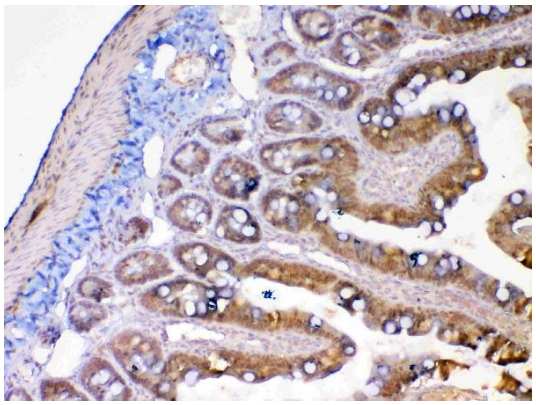
ARG41636 anti-MMP13 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Mouse small intestine tissue. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG41636 anti-MMP13 antibody at 1 µg/ml dilution, overnight at 4°C.



ARG41636 anti-MMP13 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Rat lung tissue. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG41636 anti-MMP13 antibody at 1 µg/ml dilution, overnight at 4°C.



ARG41636 anti-MMP13 antibody IHC-P image

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