MMP2 Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

Product Name	Mmp2, Polyclonal Antibody
Full Product Name	Mmp2 Antibody, Biotin conjugated
Product Gene Name	anti-Mmp2 antibody
Product Synonym Names	72 kDa type IV collagenase (EC 3.4.24.24) (72 kDa gelatinase) (Gelatinase A) (Matrix metalloproteinase-2) (MMP-2) [Cleaved into: PEX]; Mmp2
Clonality	Polyclonal
Isotype	IgG
Host	Rabbit
Species Reactivity	Mouse
Form/Format	Liquid Preservative: 0.03% Proclin 300 Constituents: 50% Glycerol, 0.01M PBS, PH7.4
Purity/Purification	Antigen Affinity Purified
Preparation and Storage	Upon receipt, store at -20 degree C or -80 degree C. Avoid repeated freeze.
Molecular Weight	65,883 Da
3D Structure	ModBase 3D Structure for P33434
Conjugation	Biotin
Immunogen	Recombinant Mouse 72 kDa type IV collagenase protein (412-662AA)
Product Categories/Family for anti-Mmp2 antibody	Cardiovascular
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Applications Tested/Suitable for anti-Mmp2 antibody	ELISA (EIA)
Related Product Information for anti-Mmp2 antibody	Ubiquitinous metalloproteinase that is involved in diverse functions such as remodeling of the vasculature, angiogenesis, tissue repair, tumor invasion, inflammation, and atherosclerotic plaque rupture. As well as degrading extracellular matrix proteins, can also act on several nonmatrix proteins such as big endothelial 1 and beta-type CGRP promoting vasoconstriction. Also cleaves KISS at a Gly-|-Leu bond. Appears to have a role in myocardial cell death pathways. Contributes to myocardial oxidative stress by regulating the activity of GSK3beta. Cleaves GSK3beta in vitro. Involved in the formation of the fibrovascular tissues (By similarity).By similarityPEX, the C-terminal non-catalytic fragment of MMP2, posseses anti-angiogenic and anti-tumor properties and inhibits cell migration and cell adhesion to FGF2 and vitronectin. Ligand for integrin alpha-v/beta-3 on the surface of blood vessels (By similarity).By similarityIsoform 2: Mediates the proteolysis of CHUK/IKKA and initiates a primary innate immune response by inducing mitochondrial-nuclear stress signaling with activation of the pro-inflammatory NF-kappaB, NFAT and IRF transcriptional pathways.
Other Notes	Small volumes of anti-Mmp2 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for Mmp2 purchase	MBS7136135 is an antibody targeting Mmp2. Also known as Mmp2 Antibody, Biotin conjugated. Reactive in Mouse. Host: Rabbit.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for Mmp2. It may not necessarily be applicable to this product.

NCBI GI #	461766
NCBI GeneID	17390
NCBI Accession #	P33434.1
UniProt Primary Accession #	P33434
UniProt Related Accession #	P33434
NCBI Official Full Name	72 kDa type IV collagenase
NCBI Official Synonym Full Names	matrix metallopeptidase 2
NCBI Official Symbol	Mmp2
NCBI Official Synonym Symbols	GelA; Clg4a; MMP-2
UniProt Protein Name	72 kDa type IV collagenase
UniProt Synonym Protein Names	72 kDa gelatinase; Gelatinase A; Matrix metalloproteinase-2; MMP-2
Protein Family	72 kDa type IV collagenase
UniProt Gene Name	Mmp2
UniProt Synonym Gene Names	MMP-2
UniProt Entry Name	MMP2_MOUSE
NCBI Protein Information	72 kDa type IV collagenase; gelatinase A; 72kD gelatinase; 72kDa gelatinase; 72 kDa gelatinase; 72kD type IV collagenase; 72kDa type IV collagenase; matrix metalloproteinase 2; matrix metalloproteinase-2
UniProt Comments for Mmp2	MMP2: Ubiquitinous metalloproteinase that is involved in diverse functions such as remodeling of the vasculature, angiogenesis, tissue repair, tumor invasion, inflammation, and atherosclerotic plaque rupture. As well as degrading extracellular matrix proteins, can also act on several nonmatrix proteins such as big endothelial 1 and beta-type CGRP promoting vasoconstriction. Also cleaves KISS at a Gly-|-Leu bond. Appears to have a role in myocardial cell death pathways. Contributes to myocardial oxidative stress by regulating the activity of GSK3beta. Cleaves GSK3beta in vitro. Interacts (via the C-terminal hemopexin-like domains- containing region) with the integrin alpha-V/beta-3; the interaction promotes vascular invasion in angiogenic vessels and melamoma cells. Interacts (via the C-terminal PEX domain) with TIMP2 (via the C-terminal); the interaction inhibits the degradation activity. Interacts with GSK3B. Aspirin appears to inhibit expression. Produced by normal skin fibroblasts. PEX is expressed in a number of tumors including gliomas, breast and prostate. Inhibited by histatin-3 1/24 (histatin-5). Belongs to the peptidase M10A family. Protein type: Protease; Secreted; Apoptosis; Cell development/differentiation; EC 3.4.24.24; Secreted, signal peptide; Motility/polarity/chemotaxis Cellular Component: extracellular matrix; proteinaceous extracellular matrix; extracellular space; sarcomere; membrane; mitochondrion; cytoplasm; plasma membrane; extracellular region; nucleus Molecular Function: peptidase activity; zinc ion binding; hydrolase activity; metallopeptidase activity; metal ion binding; metalloendopeptidase activity; fibronectin binding Biological Process: response to drug; cell migration; intramembranous ossification; positive regulation of apoptosis; tissue remodeling; negative regulation of cell adhesion; proteolysis; axon regeneration in the peripheral nervous system; blood vessel maturation; negative regulation of vasoconstriction; collagen catabolic process; response to hydrogen peroxide; ovarian follicle development; response to estrogen stimulus; skeletal morphogenesis; response to mechanical stimulus; positive regulation of innate immune response; response to hypoxia; response to oxidative stress; angiogenesis; embryo implantation; positive regulation of cell migration
Research Articles on Mmp2	**1.** mPGES-1 was essential for MMP-2 and MMP-9 up-regulation that enhances tumor metastasis

Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
Disclaimer	While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice. It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information.
Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

MyBioSource | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/polyclonal-mouse-antibody/mmp2/7136135