Mouse MMP9 Monoclonal Antibody | anti-Mmp9 antibody

MMP9 Antibody: RPE

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA103377	**Mouse**	**Human, Mouse, Rat**	**Immunoprecipitation, Western Blot, Immunohistochemistry**

PRODUCT SYNONYMS

MMP9; Monoclonal Antibody; MMP9 Antibody: RPE; MMP-9; CLG4B; 82kDa matrix metalloproteinase-9; collagenase type 4 beta; GELB; Macrophage gelatinase; MANDP2; Type V collagenase; 92 kDa gelatinase; 92 kDa type IV collagenase; Gelatinase B; Matrix metalloproteinase 9; anti-Mmp9 antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human, Mouse, Rat
Clonality	Monoclonal
Isotype	IgG2a
Clone Number	S51-82
Form/Format	Protein G Purified
Concentration	1mg/mL (varies by lot)
Sequence Length	708
Applicable Applications for anti-Mmp9 antibody	IP (Immunoprecipitation), WB (Western Blot), IHC (Immunohistochemistry)
Conjugate	RPE
Storage Buffer	PBS pH7.4, 50% glycerol, 0.09% sodium azide
Preparation and Storage	-20 degree C

IMAGES

WB (Western Blot)
Western Blot analysis of Rat Brain showing detection of ~92 kDa and ~82 kDa (pro and active) MMP9 protein using Mouse Anti-MMP9 Monoclonal Antibody, Clone S51-82 . Lane 1: Molecular Weight Ladder (MW). Lane 2: Rat Brain. Load: 15 ug. Block: 5% Skim Milk in 1X TBST. Primary Antibody: Mouse Anti-MMP9 Monoclonal Antibody at 1:1000 for 2 hours at RT. Secondary Antibody: Goat Anti-Mouse IgG: HRP at 1:2000 for 60 min at RT. Color Development: ECL solution for 5 min at RT. Predicted/Observed Size: ~92 kDa and ~82 kDa (pro and active).

ICC (Immunocytochemistry)
Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-MMP9 Monoclonal Antibody, Clone S51-82 . Tissue: NIH 3T3 (Mouse Fibroblast cell line). Species: Mouse. Fixation: 4% Formaldehyde for 15 min at RT. Primary Antibody: Mouse Anti-MMP9 Monoclonal Antibody at 1:100 for 60 min at RT. Secondary Antibody: Goat Anti-Mouse ATTO 488 at 1:200 for 60 min at RT. Counterstain: Phalloidin Texas Red F-Actin stain; DAPI (blue) nuclear stain at 1:1000, 1:5000 for 60 min at RT, 5 min at RT. Localization: Cytoplasm . Magnification: 60X.

ADDITIONAL INFORMATION

Related Product Information for anti-Mmp9 antibody	**Background Info:** Detects ~92kDa and ~82kDa (pro and active forms) **Scientific Background:** MMP9, otherwise known as matrix metalloproteinase 9, is 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 like arthritis and metastasis (1). Among the family members, MMP-2, MMP-3, MMP-7 and MMP-9 have been characterized as important factors for normal tissue remodeling during embryonic development, wound healing, tumor invasion, angiogenesis, carcinogenesis and apoptosis (2-4). MMP activity correlates with cancer development (2). One mechanism of MMP regulation is transcriptional (5). Once synthesized, MMP exists as a latent proenzyme. Maximum MMP activity requires proteolytic cleavage to generate active MMPs by releasing the inhibitory propeptide domain from the full length protein (5).
Product Categories/Family for anti-Mmp9 antibody	Apoptosis; Neuroscience
References	1. Hirose Y., et al. (2008) Am J Hum Genet. 82(5): 1122-1129. 2. Coussens L.M., et al. (2002) Science 295: 2387-2391. 3. Sternlicht M.D., et al. (1999) Cell 98: 137-146. 4. Vu T.H., et al. (1998) Cell 93: 411-422. 5. Nagase H., et al. (1990) Biochemistry 29: 5783-5789.

NCBI AND UNIPROT INFORMATION

NCBI GI #	13591993
NCBI GeneID	81687
NCBI Accession #	NP_112317.1
NCBI GenBank Nucleotide #	NM_031055.1
UniProt Accession #	P50282
Molecular Weight	78,611 Da
NCBI Official Full Name	matrix metalloproteinase-9
NCBI Official Synonym Full Names	matrix metallopeptidase 9
NCBI Official Symbol	Mmp9
NCBI Protein Information	matrix metalloproteinase-9; GELB; MMP-9; gelatinase B; 92 kDa gelatinase; 92 kDa type IV collagenase; 92-kDa type IV collagenase; matrix metalloproteinase 9 (gelatinase B 92-kDa type IV collagenase); matrix metalloproteinase 9 (gelatinase B, 92-kDa type IV collagenase)
UniProt Protein Name	Matrix metalloproteinase-9
UniProt Gene Name	**Mmp9**
UniProt Synonym Gene Names	MMP-9; GELB
UniProt Entry Name	MMP9_RAT

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: https://stage.aaabiotech.com/monoclonal/mmp9-antibody-clone-s51-82-immunoprecipitation-western-blot-immunohistochemistry-elisa/103377