

MMP9 Monoclonal Antibody (5G3)

Product Details	
Size	100 µL
Species Reactivity	Human, Mouse
Published Species	Human, Mouse
Host/Isotype	Mouse / IgG2a
Class	Monoclonal
Type	Antibody
Clone	5G3
Conjugate	Unconjugated
Immunogen	Purified recombinant fragment of human MMP9 expressed in E. Coli.
Form	Liquid
Concentration	Conc. Not Determined
Storage buffer	ascites
Contains	0.03% sodium azide
Storage conditions	Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.
RRID	AB_11157246

Applications	Tested Dilution	Publications
Western Blot (WB)	1:500-1:2,000	18 Publications
Immunohistochemistry (IHC)	-	2 Publications
Immunohistochemistry (Paraffin) (IHC (P))	1:200-1:1,000	-
Immunocytochemistry (ICC/IF)	1:200-1:1,000	3 Publications
Flow Cytometry (Flow)	1:200-1:400	-
ELISA (ELISA)	1:10,000	-

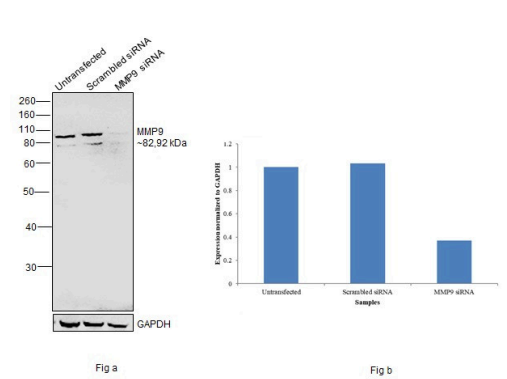
Product Specific Information

MA5-15886 targets MMP9 in indirect ELISA, FACS, IF, IHC, and WB applications and shows reactivity with Human samples.

The MA5-15886 immunogen is purified recombinant fragment of human MMP9 expressed in E. Coli. .

MA5-15886 detects MMP9 which has a predicted molecular weight of approximately 92kDa.

Product Images For MMP9 Monoclonal Antibody (5G3)

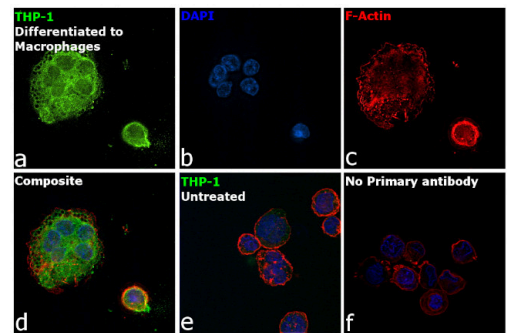


MMP9 Antibody (MA5-15886)

Antibody specificity was demonstrated by siRNA mediated knockdown of target protein. THP-1 cells were transfected with Matrix metalloproteinase-9 siRNA and decrease in signal intensity was observed in Western Blot application using Anti-MMP9 Monoclonal Antibody (5G3) (Product # MA5-15886). {KD}

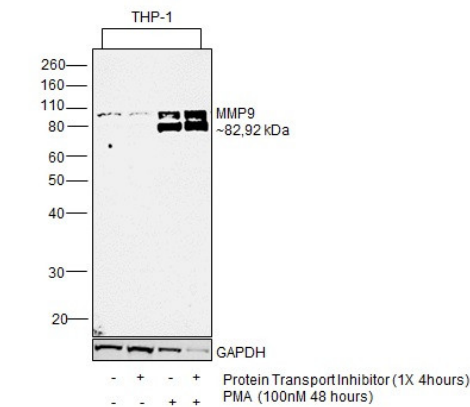
MMP9 Antibody (MA5-15886) in ICC/IF

Immunofluorescence analysis of Matrix metalloproteinase-9 was performed using 70% confluent log phase THP-1 cells differentiated to Macrophages using PMA (100nM 48 hours). The cells were fixed with 4% paraformaldehyde for 10 minutes, permeabilized with 0.1% Triton™ X-100 for 15 minutes, and blocked with 2% BSA for 45 minutes at room temperature. The cells were labeled with MMP9 Monoclonal Antibody (5G3) (Product # MA5-15886) at 1:500 dilution in 0.1% BSA, incubated at 4 degree celsius overnight and then labeled with Goat anti-Mouse IgG (H+L) Highly Cross-Adsorbed Secondary Antibody, Alexa Fluor Plus 488 (Product # A32723), (1:2000 dilution), for 45 minutes at room temperature (Panel a: Green). Nuclei (Panel b: Blue) were stained with ProLong™ Diamond Antifade Mountant with DAPI (Product # P36962). F-actin (Panel c: Red) was stained with Rhodamine Phalloidin (Product # R415, 1:300 dilution). Panel d represents the merged image showing cytoplasmic localization. Panel e represents undifferentiated THP-1 cells. Panel f represents control cells with no primary antibody to assess background. The images were captured at 60X magnification.



MMP9 Antibody (MA5-15886)

Antibody specificity was demonstrated by detection of differential basal expression of the target across cell lines owing to their inherent genetic constitution. Increased expression of both Pro-MMP9 and active MMP9 was observed in THP-1 cells differentiated to Macrophages by PMA (100nM, 48 hours) treatment and THP-1 differentiated to Macrophages using PMA and treated with Protein Transport Inhibitor (PTI); against THP-1 cells and THP-1 treated with PTI, using Anti-MMP9 Monoclonal Antibody (5G3) (Product # MA5-15886) in Western Blot. {RE}



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Western Blot (18)

<p>Advanced science (Weinheim, Baden-Wurttemberg, Germany)</p> <p>Scar-Degrading Endothelial Cells as a Treatment for Advanced Liver Fibrosis.</p> <p>"Published figure using MMP9 monoclonal antibody (Product # MA5-15886) in Western Blot"</p> <p>Authors: Zhao P,Sun T,Lyu C,Liang K,Niu Y,Zhang Y,Cao C,Xiang C,Du Y</p>	<p>Year</p> <p>2023</p>
<p>Scientific reports</p> <p>Glucosidase inhibitor, Nimbidiol ameliorates renal fibrosis and dysfunction in type-1 diabetes.</p> <p>"Published figure using MMP9 monoclonal antibody (Product # MA5-15886) in Western Blot"</p> <p>Authors: Juin SK,Pushpakumar S,Tyagi SC,Sen U</p>	<p>Year</p> <p>2022</p>

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Immunohistochemistry (2)

<p>Journal of bone oncology</p> <p>Silencing of circCYP51A1 represses cell progression and glycolysis by regulating miR-490-3p/KLF12 axis in osteosarcoma under hypoxia.</p> <p>"Published figure using MMP9 monoclonal antibody (Product # MA5-15886) in Immunohistochemistry"</p> <p>Authors: Yang J,Liu Z,Liu B,Sun L</p>	<p>Year</p> <p>2022</p>
<p>Thoracic cancer</p> <p>Identification of circ_0058357 as a regulator in non-small cell lung cancer cells resistant to cisplatin by miR-361-3p/ABCC1 axis.</p> <p>"MA5-15886 was used in Immunohistochemistry-immunofluorescence to identify that inhibition of circ_0058357 suppresses the growth and metastasis of H1299/DDP and A549/DDP cells and sensitizes them to DDP therapy partially by targeting the miR-361-3p/ABCC1 axis."</p> <p>Authors: Chu D,Li P,Li Y,Shi J,Huang S,Jiao P</p>	<p>Year</p> <p>2021</p> <p>Species</p> <p>Mouse</p>

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ICC/IF (3)

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