Datasheet for ABIN2482809

anti-MMP 9 antibody (AA 1-708) (FITC)

3 Images

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Overview

Quantity:	100 µg
Target:	MMP 9 (MMP9)
Binding Specificity:	AA 1-708
Reactivity:	Rat
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This MMP 9 antibody is conjugated to FITC
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunoprecipitation (IP), Immunocytochemistry (ICC), Immunofluorescence (IF), Flow Cytometry (FACS)

Product Details

Immunogen:	Fusion protein amino acids 1-708 (full length) of rat MMP9
Clone:	S51-82
Isotype:	IgG2a
Specificity:	Detecs ~92 kDa and ~82 kDa (pro and active forms).
Cross-Reactivity:	Human, Mouse, Rat
Purification:	Protein G Purified

Target Details

Target:	MMP 9 (MMP9)

Target Details

Alternative Name:	MMP9 (MMP9 Products)
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).
Gene ID:	81687
NCBI Accession:	NP_112317
UniProt:	P50282
Pathways:	Cellular Response to Molecule of Bacterial Origin, Positive Regulation of Immune Effector Process, CXCR4-mediated Signaling Events

Application Details

Application Notes:	• WB (1:1000) • ICC/IF (1:100) • optimal dilutions for assays should be determined by the user.
Comment:	1 µg/ml of ABIN2482809 was sufficient for detection of MMP9 in 20 µg of COS-1 cells (lysate) transfected with human MMP9 by colorimetric immunoblot analysis using goat anti-mouse IgG:HRP as the secondary antibody.
Restrictions:	For Research Use only

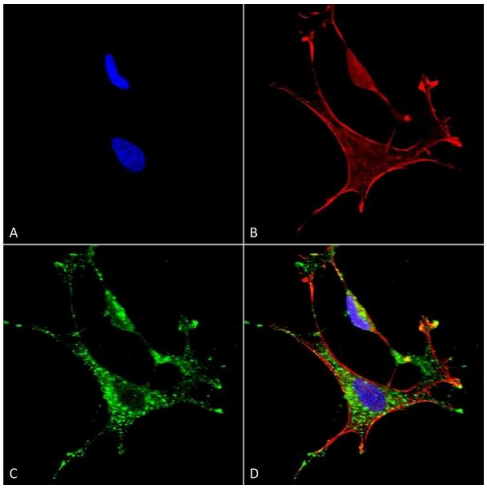
Handling

Format:	Liquid
Concentration:	1 mg/mL
Buffer:	PBS pH 7.4, 50 % glycerol, 0.09 % sodium azide, Storage buffer may change when conjugated
Preservative:	Sodium azide

Handling

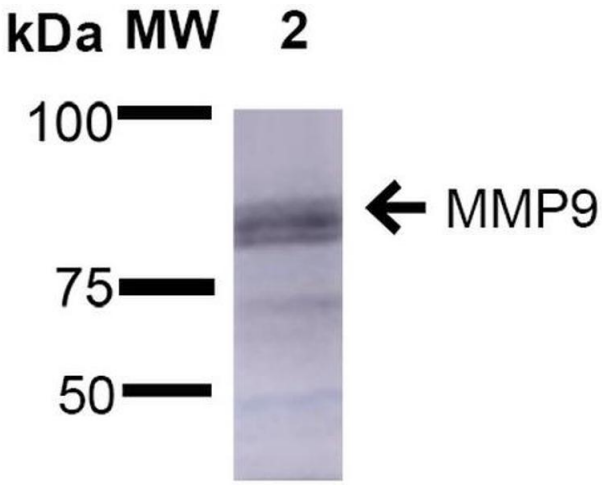
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C
Storage Comment:	Conjugated antibodies should be stored at 4°C

Images



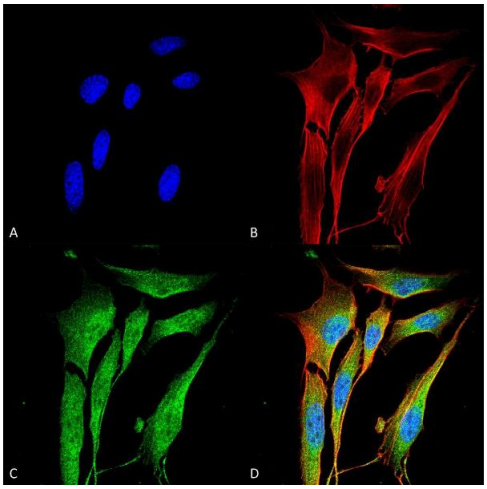
Immunocytochemistry

Image 1. Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-MMP9 Monoclonal Antibody, Clone S51-82 (ABIN2482809). Tissue: Neuroblastoma cells (SH-SY5Y). Species: Human. Fixation: 4 % PFA for 15 min. Primary Antibody: Mouse Anti-MMP9 Monoclonal Antibody (ABIN2482809) at 1:50 for overnight at 4 °C with slow rocking. Secondary Antibody: AlexaFluor 488 at 1:1000 for 1 hour at RT. Counterstain: Phalloidin-iFluor 647 (red) F-Actin stain, Hoechst (blue) nuclear stain at 1:800, 1.6 mM for 20 min at RT. (A) Hoechst (blue) nuclear stain. (B) Phalloidin-iFluor 647 (red) F-Actin stain. (C) MMP9 Antibody (D) Composite.



Western Blotting

Image 2. 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 µg. 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).



Immunofluorescence (fixed cells)

Image 3. 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. (A) DAPI (blue) nuclear stain (B) Phalloidin Texas Red F-Actin stain (C) MMP9 Antibody (D) Composite.