Product Datasheet

MMP13 Rabbit mAb

Catalog No: #49328

Package Size: #49328-1 50ul #49328-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

Description

Product Name	MMP13 Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal
Clone No.	JF0893
Purification	ProA affinity purified
Applications	WB, ICC/IF, IHC, FC
Species Reactivity	Human
Immunogen Description	recombinant protein
Conjugates	Unconjugated
Other Names	CLG 3 antibody CLG3 antibody Collagenase 3 antibody Collagenase3 antibody MANDP1 antibody Matrix metallopeptidase 13 (collagenase 3) antibody Matrix Metalloproteinase 13 antibody Matrix metalloproteinase-13 antibody MMP 13 antibody MMP-13 antibody Mmp13 antibody MMP13_HUMAN antibody
Accession No.	Swiss-Prot#:P45452
Calculated MW	54 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

Application Details

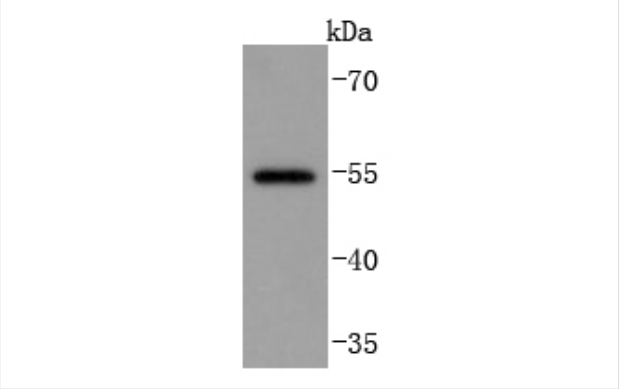
WB: 1:1,000

IHC: 1:50-1:200

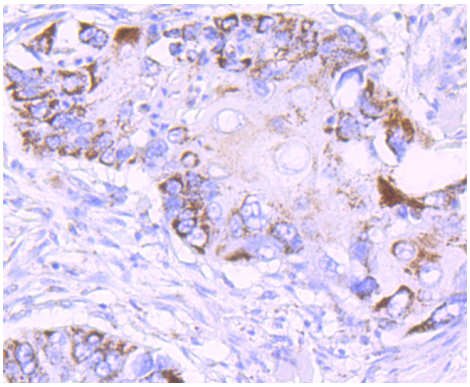
ICC: 1:100-1:500

FC: 1:50-1:100

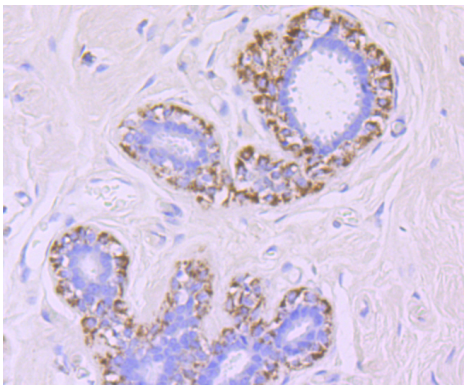
Images



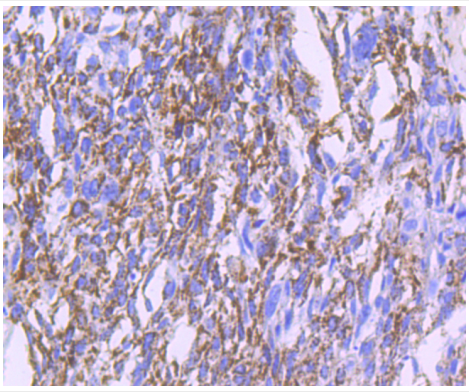
Western blot analysis of MMP13 on MCF-7 cells lysates using anti-MMP13 antibody at 1/1,000 dilution.



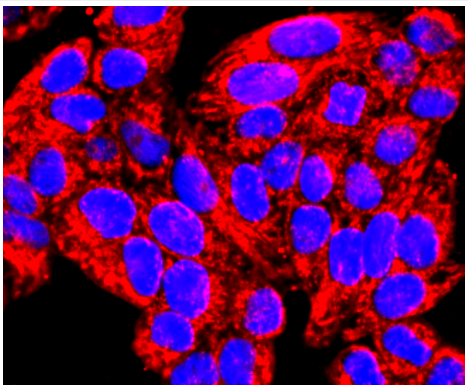
Immunohistochemical analysis of paraffin-embedded human lung cancer tissue using anti-MMP13 antibody. Counter stained with hematoxylin.



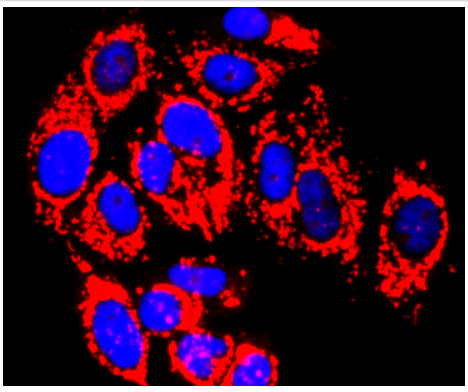
Immunohistochemical analysis of paraffin-embedded human breast tissue using anti-MMP13 antibody. Counter stained with hematoxylin.



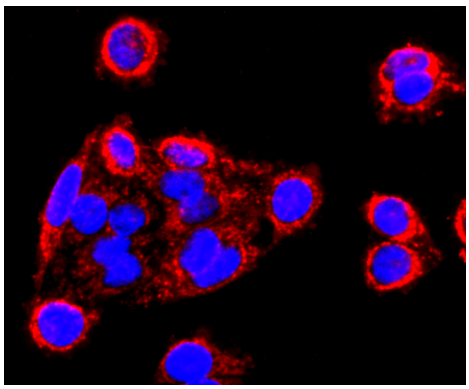
Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using anti-MMP13 antibody. Counter stained with hematoxylin.



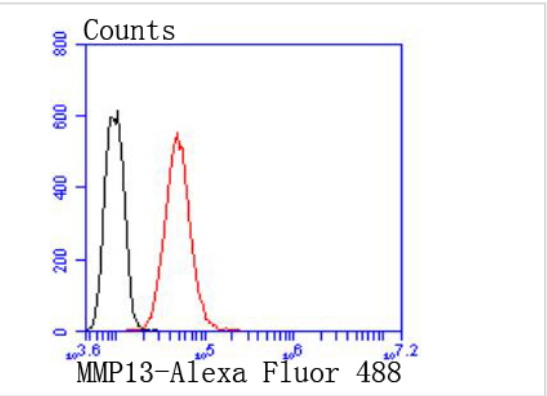
ICC staining MMP13 in Hela cells (red). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining MMP13 in MCF-7 cells (red). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining MMP13 in SW480 cells (red). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



Flow cytometric analysis of Hela cells with MMP13 antibody at 1/50 dilution (red) compared with an unlabelled control (cells without incubation with primary antibody; black). Alexa Fluor 488-conjugated goat anti rabbit IgG was used as the secondary antibody.

Background

The matrix metalloproteinases (MMP) are a family of peptidase enzymes responsible for the degradation of extracellular matrix components, including collagen, gelatin, fibronectin, laminin and proteoglycan. Transcription of MMP genes is differentially activated by phorbol ester, lipopolysaccharide (LPS) or staphylococcal enterotoxin B (SEB). MMP catalysis requires both calcium and zinc. MMP-13 (also designated collagenase-3) is produced by breast carcinomas and degrades collagen types I, II and III. MMP-13 has wide substrate specificity, and its physiologic expression is limited to situations in which rapid and effective remodeling of collagenous ECM takes place, such as fetal bone development and adult bone remodeling.

References

1. Sun Y et al. Effect of pERK2 on extracellular matrix turnover of the fibrotic joint capsule in a post-traumatic joint contracture model. Exp Ther Med 11:547-552 (2016).
2. Liang W et al. Observing the development of the temporomandibular joint in embryonic and post-natal mice using various staining methods. Exp Ther Med 11:481-489 (2016).

Published Papers

el at., Circ0007042 alleviates intervertebral disc degeneration by adsorbing miR-369 to upregulate BMP2 and activate the PI3K/AKt pathway. In Arthritis Res Ther

on 2022 Sep 6 by Zhenyu Wang, Yuguang Zhao, et al..PMID: 36068615, , (2022)

PMID:36068615

el at., β-Hydroxybutyrate alleviates cartilage senescence through hnRNP A1-mediated up-regulation of PTEN In Exp GerontolOn2023 MaybyGuang Xia , Zi Wen et al..PMID:36921676, , (2023)

PMID:36921676

Zhang Weilin, Liu Kuize, Li Zhencong, Feng Dao, Zhou Boyuan, Zhao Wei, Huang Shengbang, Dai Zhiwen, Liang Jinguo, Chen Siyuan, Wei Yen, Wei Jinsong el at., Polyethylene microplastics transported to nucleus pulposus cells via macrophages-derived exosomes, and promote intervertebral disc degeneration throughB β ¦, Ecotoxicology and Environmental Safety, (2025)

PMID:41175705

Note: This product is for in vitro research use only and is not intended for use in humans or animals.