

Anti-MMP-3 Antibody [JM46-22]

ET1705-98



Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, IHC-P, IF-Tissue
Molecular Wt:	Predicted band size: 54 kDa
Clone number:	JM46-22

Description: 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-3, MMP-10 and MMP-11 (also designated stromelysin-1, -2 and -3 respectively) activate procollagenase. MMP-3 activation of procollagenase can occur via two pathways. Direct activation by MMP-3 is slow and activation by MMP-3 in conjunction with tissue or plasma proteinases is rapid. MMP-10 is expressed in small intestine, and at lower levels in lung and heart. MMP-11 is specifically expressed in stromal cells of breast carcinomas and contributes to epithelial cell malignancies.

Immunogen: Synthetic peptide within C-terminal human MMP3.

Positive control: Rat kidney tissue lysates, human liver tissue lysate, rat liver tissue lysate, rat kidney tissue, human liver tissue, human placenta tissue, mouse liver tissue.

Subcellular location: extracellular matrix.

Database links: SwissProt: P08254 Human | P28862 Mouse | P03957 Rat

Recommended Dilutions:

WB	1:500-1:2,000
IHC-P	1:50-1:200
IF-Tissue	1:50

Storage Buffer: 1*TBS (pH7.4), 0.05% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Shipped at 4°C. Store at +4°C short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20°C long term.

Purity: Protein A affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn

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Images

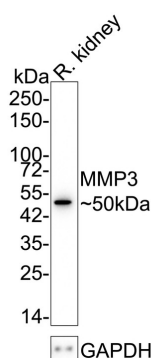


Fig1: Western blot analysis of MMP-3 on rat kidney tissue lysates with Rabbit anti-MMP-3 antibody (ET1705-98) at 1/1,000 dilution.

Lysates/proteins at 20 µg/Lane.

Predicted band size: 54 kDa

Observed band size: 50 kDa

Exposure time: 1 minutes 59 seconds;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDm/TBST for 1 hour at room temperature. The primary antibody (ET1705-98) at 1/1,000 dilution was used in 5% NFDm/TBST at 4°C overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

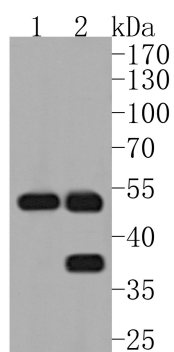


Fig2: Western blot analysis of MMP-3 on different lysates. Proteins were transferred to a PVDF membrane and blocked with 5% BSA in PBS for 1 hour at room temperature. The primary antibody (ET1705-98, 1/500) was used in 5% BSA at room temperature for 2 hours. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1:5,000 dilution was used for 1 hour at room temperature.

Positive control:

Lane 1: human liver tissue lysate

Lane 2: rat liver tissue lysate

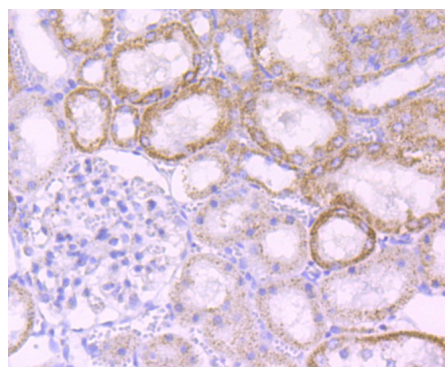


Fig3: Immunohistochemical analysis of paraffin-embedded rat kidney tissue using anti-MMP-3 antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 8.0-8.4) for 20 minutes. The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH₂O and PBS, and then probed with the primary antibody (ET1705-98, 1/50) for 30 minutes at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

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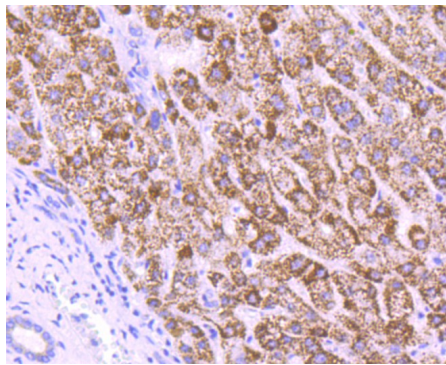


Fig4: Immunohistochemical analysis of paraffin-embedded human liver tissue using anti-MMP-3 antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 8.0-8.4) for 20 minutes. The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH₂O and PBS, and then probed with the primary antibody (ET1705-98, 1/50) for 30 minutes at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

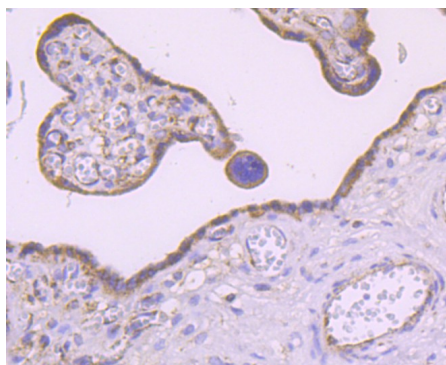


Fig5: Immunohistochemical analysis of paraffin-embedded human placenta tissue using anti-MMP-3 antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 8.0-8.4) for 20 minutes. The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH₂O and PBS, and then probed with the primary antibody (ET1705-98, 1/50) for 30 minutes at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

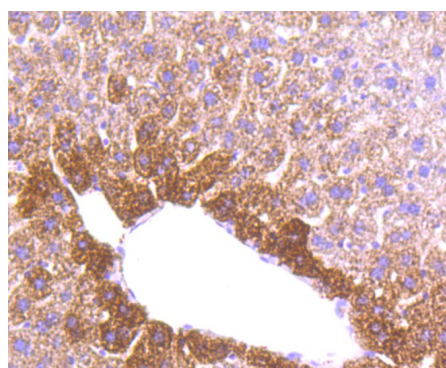


Fig6: Immunohistochemical analysis of paraffin-embedded mouse liver tissue using anti-MMP-3 antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 8.0-8.4) for 20 minutes. The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH₂O and PBS, and then probed with the primary antibody (ET1705-98, 1/50) for 30 minutes at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

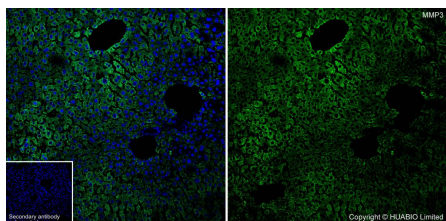
Fig7: Application: IF-Tissue

Species: Mouse

Site: liver

Sample: Paraffin-embedded section

Antibody concentration: 1/50



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Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Seehawer M et al. Loss of Kmt2c or Kmt2d drives brain metastasis via KDM6A-dependent upregulation of MMP3. *Nat Cell Biol.* 2024 Jul
2. Jiang J et al. MMP3 at the crossroads: Linking molecular pathways to disease diagnosis and therapy. *Pharmacol Res.* 2025 Jun

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