Product name: Anti-MMP9 antibody [56-2A4] ab58803

**Overview**

**Product name:** Anti-MMP9 antibody [56-2A4]

**Description:** Mouse monoclonal [56-2A4] to MMP9

**Host species:** Mouse

**Specificity:** Recognizes the ~92 kDa latent and the ~83 kDa active forms of MMP9. Does not react with MMP1, MMP2, MMP3 or MMP13. The antibody recognizes precursor (92 kDa) and active (83 kDa) forms of human and guinea pig MMP-9.

**Tested applications:** Suitable for: IHC-P, IHC-Fr, ICC/IF, WB

**Species reactivity:** Reacts with: Mouse, Rat, Rabbit, Guinea pig, Human

**Immunogen:** Synthetic peptide corresponding to Human MMP9 aa 626-644.

Sequence: LFSGRLWFDRVKAQMVD

**Database link:** P14780

**Positive control:** Breast carcinoma tissue. Conditioned medium of human fibrosarcoma HT1080 cells. The protein is secreted so you may need to concentrate the protein from cell culture media. Concentrate protein by TCA, acetone or ammonium sulphate precipitation. HL60 cell lysate, U937 cell lysate, HT1080 cell lysate, human spleen lysate

**General notes:** The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

**Properties**

**Form:** Liquid

**Storage instructions:** Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer  
pH: 7.00  
Preservative: 0.1% Sodium azide  
Constituents: 1.64% Sodium phosphate, 0.1% BSA

Purity  
Immunogen affinity purified

Purification notes  
Is purified.

Clonality  
Monoclonal

Clone number  
56-2A4

Isotype  
IgG1

Light chain type  
kappa

Applications

The Abpromise guarantee  
Our Abpromise guarantee covers the use of ab58803 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>IHC-P</td>
<td>★★★★★★☆ (3)</td>
<td>Use at an assay dependent concentration.</td>
</tr>
<tr>
<td>IHC-Fr</td>
<td>★★★★★★☆ (3)</td>
<td>Use at an assay dependent concentration.</td>
</tr>
<tr>
<td>ICC/IF</td>
<td>★★★★★★☆ (1)</td>
<td>Use at an assay dependent concentration. PubMed: 22496779</td>
</tr>
<tr>
<td>WB</td>
<td>★★★★★☆☆ (2)</td>
<td>Use a concentration of 2 µg/ml. Detects a band of approximately 92 kDa (predicted molecular weight: 78 kDa).</td>
</tr>
</tbody>
</table>

Target

Function  
May play an essential role in local proteolysis of the extracellular matrix and in leukocyte migration. Could play a role in bone osteoclastic resorption. Cleaves KiSS1 at a Gly-Leu bond. Cleaves type IV and type V collagen into large C-terminal three quarter fragments and shorter N-terminal one quarter fragments. Degrades fibronectin but not laminin or Pz-peptide.

Tissue specificity  
Produced by normal alveolar macrophages and granulocytes.

Involvement in disease  
Intervertebral disc disease  
Metaphyseal anadysplasia 2

Sequence similarities  
Belongs to the peptidase M10A family.  
Contains 3 fibronectin type-II domains.  
Contains 4 hemopexin repeats.

Domain  
The conserved cysteine present in the cysteine-switch motif binds the catalytic zinc ion, thus inhibiting the enzyme. The dissociation of the cysteine from the zinc ion upon the activation-peptide release activates the enzyme.

Post-translational modifications  
Processing of the precursor yields different active forms of 64, 67 and 82 kDa. Sequentially processing by MMP3 yields the 82 kDa matrix metalloproteinase-9. N- and O-glycosylated.

Cellular localization  
Secreted, extracellular space, extracellular matrix.
1:500 dilution of ab58803 detected MMP-9 on 10 µg of Human spleen lysates. Arrow indicates protein MMP-9 (~92 kDa). Lower bands indicate active forms of MMP-9.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit [https://www.abcam.com/abpromise](https://www.abcam.com/abpromise) or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors