abcam

Product datasheet

Anti-MMP1 antibody [EP1247Y] - Low endotoxin, Azide free ab215979



重组 RabMAb

12 References 11 图像

概述

产品名称 Anti-MMP1抗体[EP1247Y] - Low endotoxin, Azide free

描述 兔单克隆抗体[EP1247Y] to MMP1 - Low endotoxin, Azide free

宿主 Rabbit

特异性 This antibody is able to detect recombinant protein in western blot but it failed to detect the

endogenous protein. Therefore, we do not recommend the antibody in this application. For

western blot application we recommend using ab134184.

经测试应用 适用于: Flow Cyt (Intra), IHC-P, ICC/IF

不适用于: IP or WB

种属反应性 与反应: Human

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

阳性对照 IHC-P: Human testis and cervical carcinoma tissues. ICC/IF: HeLa and MCF7 cells. Flow Cyt

(intra): HeLa cells.

常规说明 ab215979 is the carrier-free version of ab52631.

> Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cellbased assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production

For more information see here.

Our $\mathsf{RabMAb}^{\texttt{®}}$ technology is a patented hybridoma-based technology for making rabbit

monoclonal antibodies. For details on our patents, please refer to **RabMAb patents**.

Our <u>Low endotoxin, azide-free formats</u> have low endotoxin level (≤ 1 EU/ml, determined by the LAL assay) and are free from azide, to achieve consistent experimental results in functional assays.

Rat: We have preliminary internal testing data to indicate this antibody may not react with this species. Please contact us for more information.

性能

形式 Liquid

存放说明 Shipped at 4°C. Store at +4°C. Do Not Freeze.

存储溶液 pH: 7.20

Constituent: PBS

无载体 是

纯**度** Protein A purified

同种型 lgG

应用

The Abpromise guarantee Abpromise™承诺保证使用ab215979于以下的经测试应用

"应用说明"部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
Flow Cyt (Intra)		Use at an assay dependent concentration. ab199376 - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. See IHC antigen retrieval protocols.
ICC/IF		Use at an assay dependent concentration.

应**用说明** Is unsuitable for IP or WB.

靶标

功能 Cleaves collagens of types I, II, and III at one site in the helical domain. Also cleaves collagens of

types VII and X. In case of HIV infection, interacts and cleaves the secreted viral Tat protein,

leading to a decrease in neuronal Tat's mediated neurotoxicity.

序列相似性 Belongs to the peptidase M10A family.

Contains 4 hemopexin-like domains.

结构域 There are two distinct domains in this protein; the catalytic N-terminal, and the C-terminal which is

involved in substrate specificity and in binding TIMP (tissue inhibitor of metalloproteinases). 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.

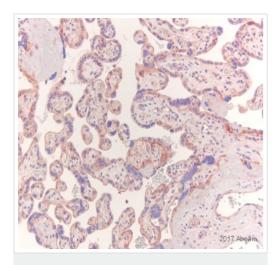
翻译后修饰 Undergoes autolytic cleavage to two major forms (22 kDa and 27 kDa). A minor form (25 kDa) is

the glycosylated form of the 22 kDa form. The 27 kDa form has no activity while the 22/25 kDa

form can act as activator for collagenase.

细胞定位 Secreted > extracellular space > extracellular matrix.

图片



Formaldehyde-fixed, paraffin-embedded human placenta tissue stained for MMP1 using <u>ab52631</u> at 1/40 dilution in immunohistochemical analysis.

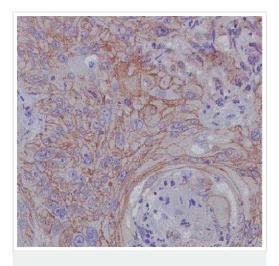
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab52631).

Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-MMP1 antibody

[EP1247Y] - Low endotoxin, Azide free (ab215979)

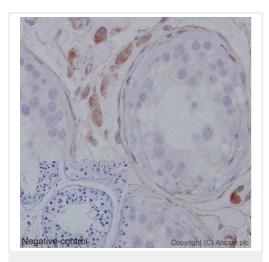
This image is courtesy of an anonymous Abreview.

Immunohistochemical analysis of paraffin-embedded human squamous cell carcinoma of cervix tissue labeling MMP1 with ab52631 at 1/100 dilution followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051, 1/500). Counterstained with hematoxylin.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-MMP1 antibody

[EP1247Y] - Low endotoxin, Azide free (ab215979)



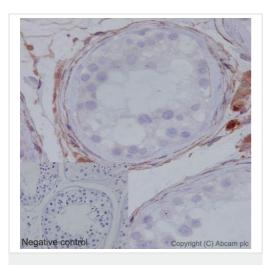
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-MMP1 antibody

[EP1247Y] - Low endotoxin, Azide free (ab215979)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human testis tissue labelling MMP1 with unpurified ab52631 at 1/60. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. A prediluted HRP-polymer conjugated anti-rabbit lgG was used as the secondary antibody. Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.

IHC result showed parenchymal cells (such as spermatogonium and spermatocytes) in seminiferous tubules were negative, and the stromal cells were stained.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab52631</u>).

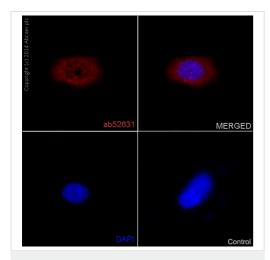


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-MMP1 antibody

[EP1247Y] - Low endotoxin, Azide free (ab215979)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human testis tissue labelling MMP1 with purified ab52631 at 1/100. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. A prediluted HRP-polymer conjugated anti-rabbit lgG was used as the secondary antibody. Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.

IHC result showed parenchymal cells (such as spermatogonium and spermatocytes) in seminiferous tubules were negative, and the stromal cells were stained.

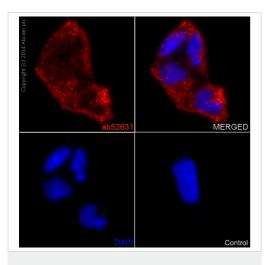


Immunocytochemistry/ Immunofluorescence - Anti-MMP1 antibody [EP1247Y] - Low endotoxin, Azide free (ab215979)

Immunocytochemistry/Immunofluorescence analysis of HeLa cells labelling MMP1 with unpurified <u>ab52631</u> at 1/30. Cells were fixed with 4% paraformaldehyde. An Alexa Fluor[®] 555-conjugated goat anti-rabbit lgG (1/500) was used as the secondary antibody. DAPI (blue) was used as the nuclear counterstain.

Control: primary antibody (1/30) and secondary antibody, **ab150120**, an Alexa Fluor[®] 594-conjugated goat anti-mouse IgG (1/500).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab52631).

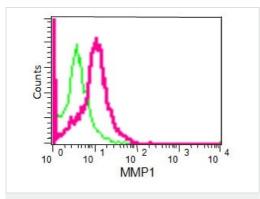


Immunocytochemistry/ Immunofluorescence - Anti-MMP1 antibody [EP1247Y] - Low endotoxin, Azide free (ab215979)

Immunocytochemistry/Immunofluorescence analysis of HeLa cells labelling MMP1 with purified <u>ab52631</u> at 1/50. Cells were fixed with 4% paraformaldehyde. An Alexa Fluor[®] 555-conjugated goat antirabbit lgG (1/500) was used as the secondary antibody. DAPI (blue) was used as the nuclear counterstain.

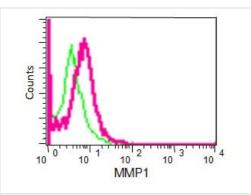
Control: primary antibody (1/50) and secondary antibody, **ab150120**, an Alexa Fluor[®] 594-conjugated goat anti-mouse lgG (1/500).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab52631).



Flow Cytometry (Intracellular) - Anti-MMP1 antibody [EP1247Y] - Low endotoxin, Azide free (ab215979)

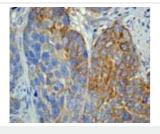
Flow cytometry analysis of HeLa cells labelling MMP1 with unpurified ab52631 at 1/50 (red). Cells were fixed with 2% paraformaldehyde. A FITC-conjugated goat anti-rabbit lgG (1/150) was used as the secondary antibody. Green - lsotype control, rabbit monoclonal lgG.



Flow Cytometry (Intracellular) - Anti-MMP1 antibody [EP1247Y] - Low endotoxin, Azide free (ab215979)

Flow cytometry analysis of HeLa cells labelling MMP1 with purified ab52631 at 1/70 (red). Cells were fixed with 2% paraformaldehyde. A FITC-conjugated goat anti-rabbit lgG was used as the secondary antibody (1/150). Green - Isotype control, rabbit monoclonal lgG.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab52631).

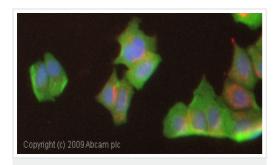


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-MMP1 antibody

[EP1247Y] - Low endotoxin, Azide free (ab215979)

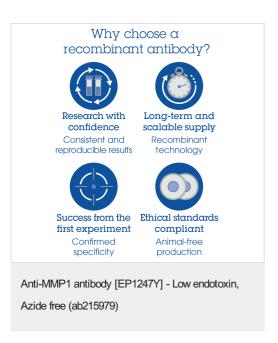
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human cervical carcinoma tissue labelling MMP1 with <u>ab52631</u> at 1/50.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab52631).



Immunocytochemistry/ Immunofluorescence - Anti-MMP1 antibody [EP1247Y] - Low endotoxin, Azide free (ab215979)

ICC/IF image of unpurified <u>ab52631</u> stained MCF7 cells. The cells were 4% PFA fixed (10 min) and then incubated in 1% BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (<u>ab52631</u>, 1/1000 dilution) overnight at +4°C. The secondary antibody (green) was Alexa Fluor[®] 488 goat anti-rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor[®] 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.



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