

## Product datasheet

# Anti-MMP14 antibody [EP1264Y] ab51074

リコンビナント RabMAb®

★★★★☆ 13 Abreviews 56 References 画像数 5

### 製品の概要

<b>製品名</b>	Anti-MMP14 antibody [EP1264Y]
<b>製品の詳細</b>	Rabbit monoclonal [EP1264Y] to MMP14
<b>由来種</b>	Rabbit
<b>アプリケーション</b>	<b>適用あり:</b> IHC-P, IP, WB <b>適用なし:</b> Flow Cyt or ICC/IF
<b>種交差性</b>	<b>交差種:</b> Mouse, Rat, Human <b>交差が予測される動物種:</b> Cow
<b>免疫原</b>	Synthetic peptide corresponding to Human MMP14. (Peptide available as <a href="#">ab185123</a> )
<b>ポジティブ・コントロール</b>	IHC: Human breast carcinoma, endometrium carcinoma and kidney tissues. WB: Human fetal spleen, esophagus and lung cancer tissue lysates, mouse and rat spleen tissue lysates and A431 whole cell lysate. Flow Cyt: A549 cells. IP: A431 cell lysate.
<b>特記事項</b>	A trial size is available to purchase for this antibody.  The mouse and rat recommendation is based on the WB results. This antibody may not be suitable for IHC with mouse or rat samples.  Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb® patents</a>  <b>We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you have any questions regarding this update, please contact our Scientific Support team.</b>  This product is a recombinant rabbit monoclonal antibody.

### 製品の特性

<b>製品の状態</b>	Liquid
<b>保存方法</b>	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.

バッファー	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol, 0.05% BSA
精製度	Protein A purified
ポリ/モノ	モノクローナル
クローン名	EP1264Y
アイソタイプ	IgG

## アプリケーション

Our [Abpromise guarantee](#) covers the use of **ab51074** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

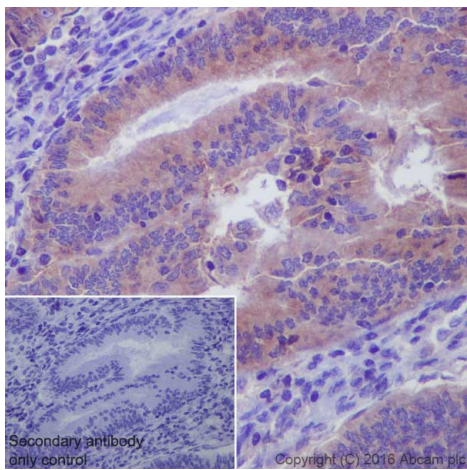
アプリケーション	Abreviews	特記事項
IHC-P	★★★★☆	1/100.
IP		1/20. <b>For unpurified use at 1/100.</b>
WB	★★★★☆	1/5000. Predicted molecular weight: 66 kDa. Can be blocked with <a href="#">MMP14 peptide (ab185123)</a> . <b>For unpurified use at 1/2000.</b>

**追加情報** Is unsuitable for Flow Cyt or ICC/IF.

## ターゲット情報

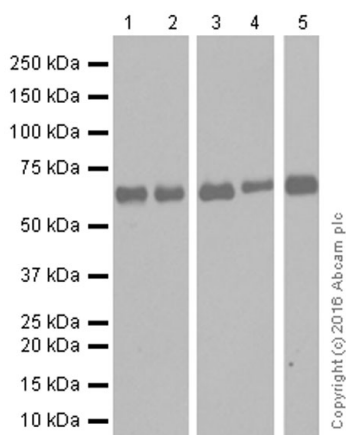
<b>機能</b>	Seems to specifically activate progelatinase A. May thus trigger invasion by tumor cells by activating progelatinase A on the tumor cell surface. May be involved in actin cytoskeleton reorganization by cleaving PTK7.
<b>組織特異性</b>	Expressed in stromal cells of colon, breast, and head and neck. Expressed in lung tumors.
<b>配列類似性</b>	Belongs to the peptidase M10A family. Contains 4 hemopexin-like domains.
<b>ドメイン</b>	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.
<b>翻訳後修飾</b>	The precursor is cleaved by a furin endopeptidase.
<b>細胞内局在</b>	Membrane. Melanosome. Identified by mass spectrometry in melanosome fractions from stage I to stage IV.

## 画像



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MMP14 antibody [EP1264Y] (ab51074)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human endometrium carcinoma tissue sections labeling MMP14 with purified ab51074 at 1/100 dilution (1.7 µg/ml). Heat mediated antigen retrieval was performed using EDTA Buffer, PH9. Hematoxylin was used to counter stain. ab97051, a Goat Anti-Rabbit IgG H&L (HRP) secondary antibody was used at 1/500 dilution. PBS instead of the primary antibody was used as the negative control.



Western blot - Anti-MMP14 antibody [EP1264Y] (ab51074)

**All lanes :** Anti-MMP14 antibody [EP1264Y] (ab51074) at 1/5000 dilution (purified)

- Lane 1 :** Human fetal spleen lysate
- Lane 2 :** Human lung cancer lysate
- Lane 3 :** Mouse spleen lysate
- Lane 4 :** Rat spleen lysate
- Lane 5 :** Human esophagus lysate

Lysates/proteins at 20 µg per lane.

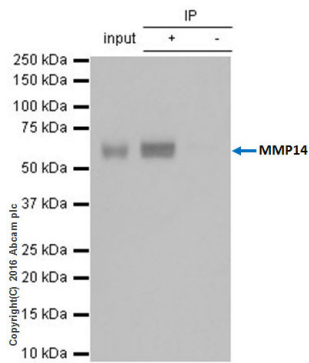
**Secondary**

**All lanes :** Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/2000 dilution

**Predicted band size:** 66 kDa

**Observed band size:** 66 kDa

Blocking and diluting buffer: 5% NFDM/TBST.



Immunoprecipitation - Anti-MMP14 antibody  
[EP1264Y] (ab51074)

ab51074 (purified) at 1/20 dilution (2µg)  
immunoprecipitating MMP14 in A431 (human  
epidermoid carcinoma) whole cell lysate.

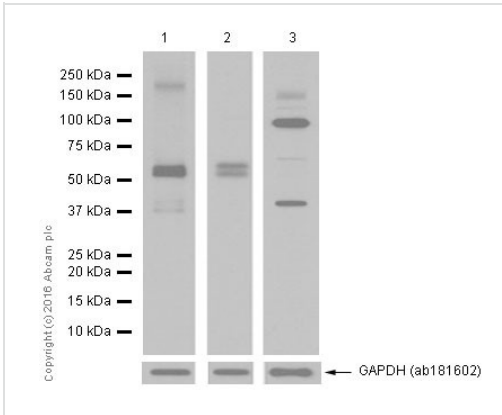
**Lane 1 (input):** A431 (human epidermoid  
carcinoma)whole cell lysate 10ug

**Lane 2 (+):** ab51074 + A431 (human  
epidermoid carcinoma)whole cell lysate

**Lane 3 (-):** Rabbit monoclonal IgG  
([ab172730](#)) instead of ab51074 in A431  
(human epidermoid carcinoma) whole cell  
lysate

For western blotting, [ab131366](#) VeriBlot for IP  
(HRP) was used as the secondary antibody  
(1/1000).

Blocking and diluting buffer and concentration:  
5% NFDm/TBST.



Western blot - Anti-MMP14 antibody [EP1264Y] (ab51074)

**All lanes :** Anti-MMP14 antibody [EP1264Y] (ab51074) at 1/2000 dilution (unpurified)

**Lane 1 :** Human fetal spleen tissue lysate

**Lane 2 :** Human lung cancer tissue lysate

**Lane 3 :** MCF7 (Human breast adenocarcinoma cell line) whole cell lysate

Lysates/proteins at 15 µg per lane.

### Secondary

**All lanes :** Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/2000 dilution

**Predicted band size:** 66 kDa

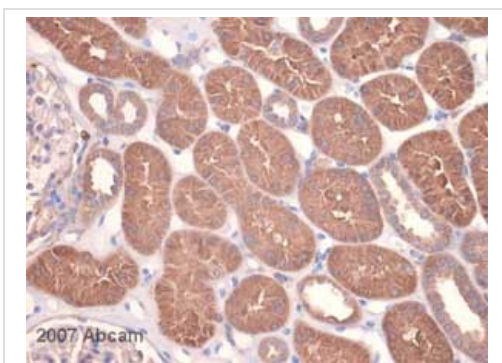
**Observed band size:** 60,63 kDa

**Exposure time:** 10 seconds

Blocking/Diluting buffer and concentration 5% NFDM/TBST

63 kDa: pro-form; 60 kDa: active form.

MCF-7 is a MMP-14 negative or weakly expressed cell line (PMID: 25977338 and PMID: 19208838).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MMP14 antibody [EP1264Y] (ab51074)

This image is courtesy of an anonymous Abreview

ab51074 (unpurified) at 1/500 staining human kidney tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step (in Tris/EDTA) was performed. The tissue was then blocked with serum and incubated with the primary antibody. A biotinylated donkey anti-rabbit IgG was used as the secondary.

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