

## Product datasheet

### Anti-MMP14 antibody ab53712

★★★★★ [3 Abreviews](#) [29 References](#) [3 Images](#)

#### Overview

<b>Product name</b>	Anti-MMP14 antibody
<b>Description</b>	Rabbit polyclonal to MMP14
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, IHC-P
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Synthetic peptide corresponding to Human MMP14 aa 471-520 (C terminal). Database link: <a href="#">P50281</a>
<b>General notes</b>	<p>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.</p> <p>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&amp;As</p>

#### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: 50% Glycerol, 0.87% Sodium chloride, 49% PBS
<b>Purity</b>	Immunogen affinity purified
<b>Purification notes</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

#### Applications

## The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab53712 in the following tested applications.

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

Application	Abreviews	Notes
WB	★★★★★ (2)	1/500 - 1/1000. Detects a band of approximately 66 kDa (predicted molecular weight: 66 kDa).
IHC-P	★★★★★ (1)	1/50 - 1/100.

## Target

### Function

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.

### Tissue specificity

Expressed in stromal cells of colon, breast, and head and neck. Expressed in lung tumors.

### Sequence similarities

Belongs to the peptidase M10A family.  
Contains 4 hemopexin-like domains.

### 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.

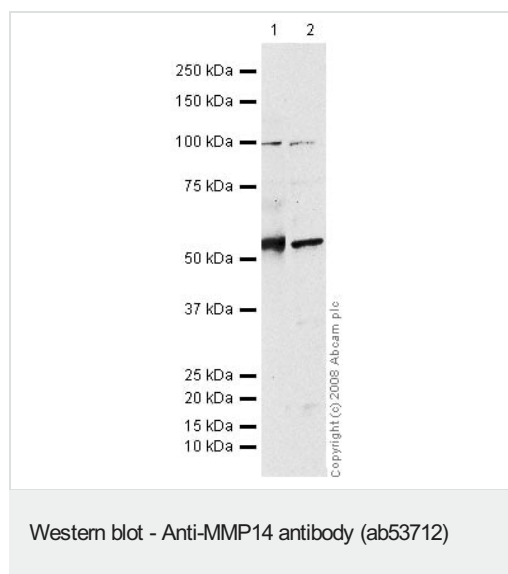
### Post-translational modifications

The precursor is cleaved by a furin endopeptidase.

### Cellular localization

Membrane. Melanosome. Identified by mass spectrometry in melanosome fractions from stage I to stage IV.

## Images



**All lanes :** Anti-MMP14 antibody (ab53712) at 1 µg/ml

**Lane 1 :** Human testis tissue lysate - total protein ([ab30257](#))

**Lane 2 :** K562 (Human erythromyeloblastoid leukemia cell line)

Whole Cell Lysate

Lysates/proteins at 10 µg per lane.

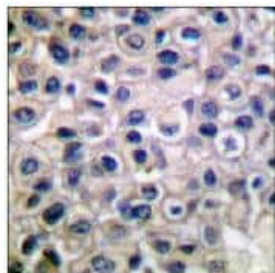
### Secondary

**All lanes :** Goat polyclonal to Rabbit IgG - H&L - Pre-Adsorbed (HRP) at 1/3000 dilution

**Predicted band size:** 66 kDa

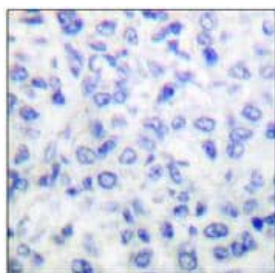
**Observed band size:** 66 kDa

**Additional bands at:** 100 kDa. We are unsure as to the identity of these extra bands.



ab53712, at a 1/50 dilution, minus immunising peptide, staining Human MMP14 in Breast Carcinoma, using Immunohistochemistry, Paraffin embedded tissue.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MMP14 antibody (ab53712)



ab53712, at a 1/50 dilution, plus immunising peptide, staining Human MMP14 in Breast Carcinoma, using Immunohistochemistry, Paraffin embedded tissue.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MMP14 antibody (ab53712)

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

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