

# Product Datasheet

## MMP-12 Antibody (EP1261Y) NB110-57214

Unit Size: 0.1 ml

Store at -20C. Avoid freeze-thaw cycles.

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**NB110-57214**

MMP-12 Antibody (EP1261Y)

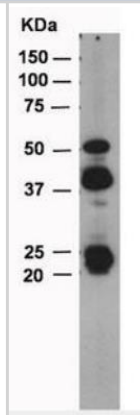
Product Information	
Unit Size	0.1 ml
Concentration	This product is unpurified. The exact concentration of antibody is not quantifiable.
Storage	Store at -20C. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	EP1261Y
Preservative	0.01% Sodium Azide
Isotype	IgG
Purity	Tissue culture supernatant
Buffer	59% PBS (pH 7.2), 0.05% BSA and 40% Glycerol

Product Description	
Host	Rabbit
Gene ID	4321
Gene Symbol	MMP12
Species	Human, Mouse, Rat
Immunogen	A synthetic peptide corresponding to residues on the C-terminus of human MMP-12 was used as an immunogen.
Notes	Produced using Abcam's RabMab® technology. RabMab® technology is covered by the following U.S. Patents, No. 5,675,063 and/or 7,429,487.

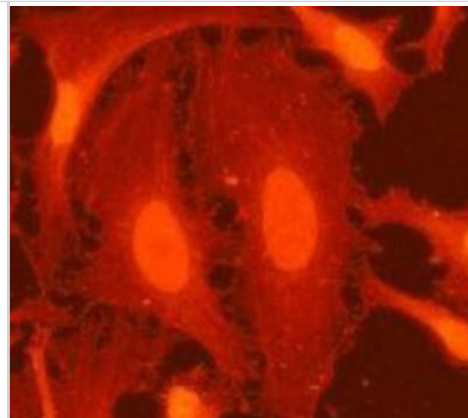
Product Application Details	
Applications	Western Blot, Flow Cytometry, Immunocytochemistry/Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin, Immunoprecipitation
Recommended Dilutions	Western Blot 1:1000-1:10000, Flow Cytometry 1:10, Immunohistochemistry 1:10-1:500, Immunocytochemistry/Immunofluorescence 1:100-250, Immunoprecipitation 1:30, Immunohistochemistry-Paraffin 1:100-250
Application Notes	In Western blot this antibody detects a band at approximately 54/45/22 (3 isoforms)

**Images**

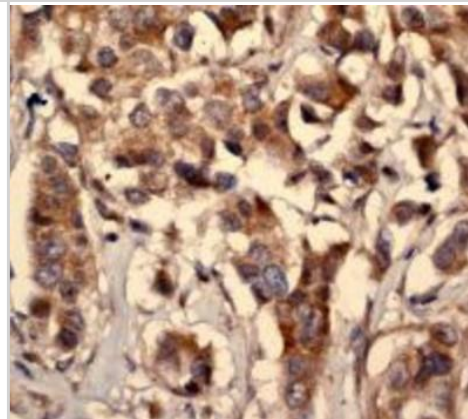
Western Blot: MMP-12 Antibody (EP1261Y) [NB110-57214] - Carboxyterminal end. Predicted band size : 54 kDa



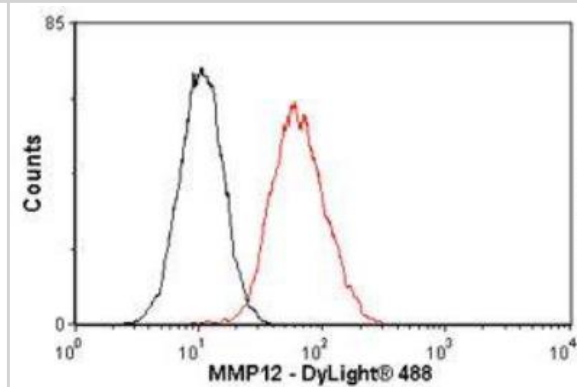
Immunocytochemistry/Immunofluorescence: MMP-12 Antibody (EP1261Y) [NB110-57214] - MMP12 Antibody (EP1261Y) [NB110-57214] - HeLa cells.



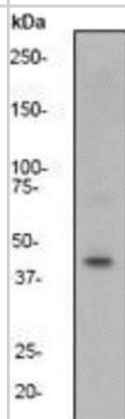
Immunohistochemistry: MMP-12 Antibody (EP1261Y) [NB110-57214] - Immunohistochemical staining of paraffin-embedded human breast carcinoma using anti-MMP-12 (cat. #110-57214).



Flow Cytometry: MMP-12 Antibody (EP1261Y) [NB110-57214] - Overlay histogram showing A549 cells stained with (red line).



Western Blot: MMP-12 Antibody (EP1261Y) [NB110-57214] - Recombinant protein using a 1:2000 dilution.



**Publications**

Vanni C, Ognibene M, Finetti F et al. Dbl oncogene expression in MCF-10 A epithelial cells disrupts mammary acinar architecture, induces EMT and angiogenic factor secretion *Cell Cycle* 2015 Feb 27 [PMID: 25723869] (WB)

Park MY, Sohn S, Lee ES et al. Photorejuvenation induced by 5-aminolevulinic acid photodynamic therapy in patients with actinic keratosis: a histologic analysis. *J Am Acad Dermatol* 2010 Jan [PMID: 19926165]

Suzuki H, Sugimura Y, Iwama S et al. Minocycline prevents osmotic demyelination syndrome by inhibiting the activation of microglia. *J Am Soc Nephrol* 2010 Dec [PMID: 21030598]

Cheng XW, Okumura K, Kuzuya M et al. Mechanism of diastolic stiffening of the failing myocardium and its prevention by angiotensin receptor and calcium channel blockers. *J Cardiovasc Pharmacol* 2009 Jul [PMID: 19528815] (WB)





**Immunohistochemistry Protocol for MMP12 Antibody (NB110-57214)**

## Immunohistochemistry Protocol for Paraffin-embedded Tissues

**1. Solutions and reagents**

## 1.1. Xylene

1.2. Ethanol, anhydrous denatured, histological grade (100%, 95%, 70%)

## 1.3. Washing buffer:

TBST washing buffer: 1XTBS/0.1% Tween-20

To prepare stock solution of 10X TBS: add 24.2 g Trizma base and 80 g sodium chloride to 1L of dH<sub>2</sub>O. Adjust pH to 7.6.Working solution. 1XTBST/0.1% Tween-20: add 100ml 10XTBS to 900 ml dH<sub>2</sub>O. Add 1 ml Tween-20 and mix well.1.4. Distilled water (dH<sub>2</sub>O)

## 1.5. Antigen Retrieval Solution:

0.01M Sodium Citrate Buffer, pH 6.0

To prepare stock solutions:

Solution A. 0.1 M citric acid solution: dissolve 21.0 g of citric acid, monohydrate (C<sub>6</sub>H<sub>8</sub>O<sub>7</sub>.H<sub>2</sub>O) in 1 liter of dH<sub>2</sub>O.Solution B. 0.1M sodium citrate solution: dissolve 29.4 g trisodium citrate dihydrate (C<sub>6</sub>H<sub>5</sub>Na<sub>3</sub>O<sub>7</sub>.2H<sub>2</sub>O) in 1 liter of dH<sub>2</sub>O.Working solution: Add 9 ml of Stock solution A and 41 ml of stock solution B to 450 ml of dH<sub>2</sub>O. Adjust pH to 6.0.

## 1.6. 3% Hydrogene Peroxide

## 1.7. Blocking buffer:

PBS (Dulbeccos Phosphate Buffered Salts, 1X, catalog #21-031-CV from Mediatech, Inc.) + 10% serum (serum origin depends on the host of the secondary antibody)

## 1.8. Hematoxylin QS (catalog #H-3404 from Vector Laboratories, Inc.)

## 1.9. Permanent Mounting medium (VectaMount, catalog# H-5000 Vector Laboratories, Inc.)

**2. Protocol**

## 2.1. Deparaffinization/Rehydration

2.1.1. Heat slides in an oven at 65C for 1 hour.

2.1.2. De-paraffinize/hydrate using the following series of washes: two Xylene washes (5 min each), followed by two 100% ethanol rinses (5 min each), followed by 95% ethanol, 70% ethanol, 50% ethanol, 30% ethanol, followed by H<sub>2</sub>O and a TBST wash for 5 min on a shaker.

## 2.2. Antigen Retrieval

2.2.1. Immerse slides into staining dish containing Antigen Retrieval Solution.

2.2.2. Place covered staining dish into the rice cooker. Add 120 ml of dH<sub>2</sub>O.

2.2.3. When cook is turned to warm (about 20 to 30 min), unplug the cooker and remove the staining dish to the bench top.

2.2.4. Allow to cool down, without cover, for 20 min.

## 2.3. Staining

2.3.1. Wash slides with TBST for 5 min on a shaker.

2.3.2. Inactivate endogenous peroxidase by covering tissue with 3% hydrogen peroxide for 10 min.

2.3.3. Wash slides three times with TBST (3 min each on a shaker).

2.3.4. Block slides with the blocking solution for 1 hour.

2.3.5. Dilute primary antibody in the blocking buffer per recommendation on the data sheet.

2.3.6. Apply primary antibody to each section and incubate overnight in the humidified chamber (4C).

2.3.7. Wash slides three times with TBST (3 min each on a shaker).

2.3.8. Apply to each section secondary HRP-conjugated anti-rabbit antibody diluted in the blocking solution per manufacturers recommendation; incubate for 1 hour at room temperature.

2.3.9. Wash slides three times with TBST (3 min each on a shaker).

2.3.10. Add freshly prepared DAB substrate to the sections.

2.3.11. Incubate tissue sections with the substrate at room temperature until suitable staining develops (generally 2 to 5 min).

2.3.12. Rinse sections with water.

2.3.13. Counterstain with Hematoxylin.

2.3.14. Rinse sections with water.

2.3.15. Dehydrate samples using two rinses with 100% Ethanol (20 dips per rinse) followed by two rinses with Xylene (30 dips per rinse).

2.3.16. Mount coverslips on slides using Permount medium.



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