

**EpiSelect MMP Sampler Kit  
Product Data Sheet**

**Catalog #5006-1**

**Lot #:** Please refer to the vial  
**Quantity:** 40 µl per vial x 10 vials

**Description:** A sample/panel kit with rabbit monoclonals (RabMAbs™) specific to 10 members of matrix metalloproteinase (MMP) family. Each kit includes sufficient sample amount of MMP antibodies for various recommended immunoassays.

**Background:**

Matrix Metalloproteases (MMPs) are a family of 25 endoproteases expressed in mammals known to degrade extracellular matrix and basement membrane components. The classification of different family members was made by domain structure as well as substrate specificity (1). MMPs are expressed as inactive zymogens, and are secreted from many connective tissues and pro-inflammatory cells such as fibroblasts, osteoblasts, endothelial cells, macrophages, lymphocytes and neutrophils. At normal conditions, the expression and activation of MMPs are tightly regulated (2).

Under pathogenic conditions, increased activation inactive pro-MMPs by other intra- and intercellular proteases was observed, and these active proteases are capable of degrading components of extra-cellular matrix and many other intra- and inter-cellular proteins, contribute to the progression of pathogenic conditions.

MMPs have been shown to be highly connected with a variety of diseases, including arthritis, inflammation, cancer, angiogenesis, atherosclerosis, cardiac diseases, stroke, ocular diseases, gastrointestinal diseases, and oral diseases. Many of MMPs are molecular targets for the development of many drugs. Due to their importance in health and diseases, members of MMPs are under heavy investigations in basic and clinical studies (3).

**Antibody Descriptions:**

Antibody	Clone ID	MW (kDa)	Species	Positive Control	Application - Usage Guideline				
					WB	IHC	ICC	IP	FC
MMP-1	EP1249Y	52-56	Hu	A431	1:500-1000	1:50-100	1:100-250	1:30	1:20
MMP-2	EP1183Y	72(pro)/64(active)	Hu, Ms, Rt	A431	1:500-1000	N/A	N/A	N/A	N/D
MMP-3	EP1186Y	45/50	Hu, Ms, Rt	A431	1:500-1000	1:100-250	1:100-250	N/D	N/D
MMP-9	EP1255Y	92	Hu	A431	1:250-500	1:100-250	1:250-500	N/D	1:20
MMP-11	EP1259Y	58(latent)/45(active)	Hu, Ms, Rt	A431	1:250-500	1:100-250	1:100-250	N/D	N/D
MMP-12	EP1261Y	54/45/22	Hu, Ms, Rt	MCF-7	1:500-2000	1:100-250	1:100-250	1:30	1:10
MMP-13	EP1263Y	60	Hu, Ms	HeLa	1:500-1000	N/D	N/D	N/D	N/D
MMP-14	EP1264Y	65	Hu, Ms, Rt	A431	1:500-2000	1:100-250	1:100-250	1:100	1:50
MMP-17	EP1270Y	67/58	Hu, Ms, Rt	HeLa +conA	1:500-1000	1:50-100	1:50-100	N/A	N/A
MMP-21	EP1277Y	58/45	Hu, Ms, Rt	MCF-7	1:1000-5,000	N/D	N/D	N/D	N/D

**Note** – Hu (Human), Ms (Mouse), Rt (Rat); RTU (Ready to Use), ND (Not Determined), NA (Not Applicable)

Please visit [www.epitomics.com](http://www.epitomics.com) for recommended protocols

**Recommended products:**

Item Name	Amount	Cat#
Anti-Rabbit IgG, HRP conjugate	1 ml	3050-1
Positive Control Cell Lysate	100ug	Various – contact Epitomics for details

**Storage Conditions:**

Store at -20 °C. Buffer: PBS with 200 mg/ml BSA, 40 % glycerol and 0.02% NaN3.  
Stable for 12 months from date of receipt.

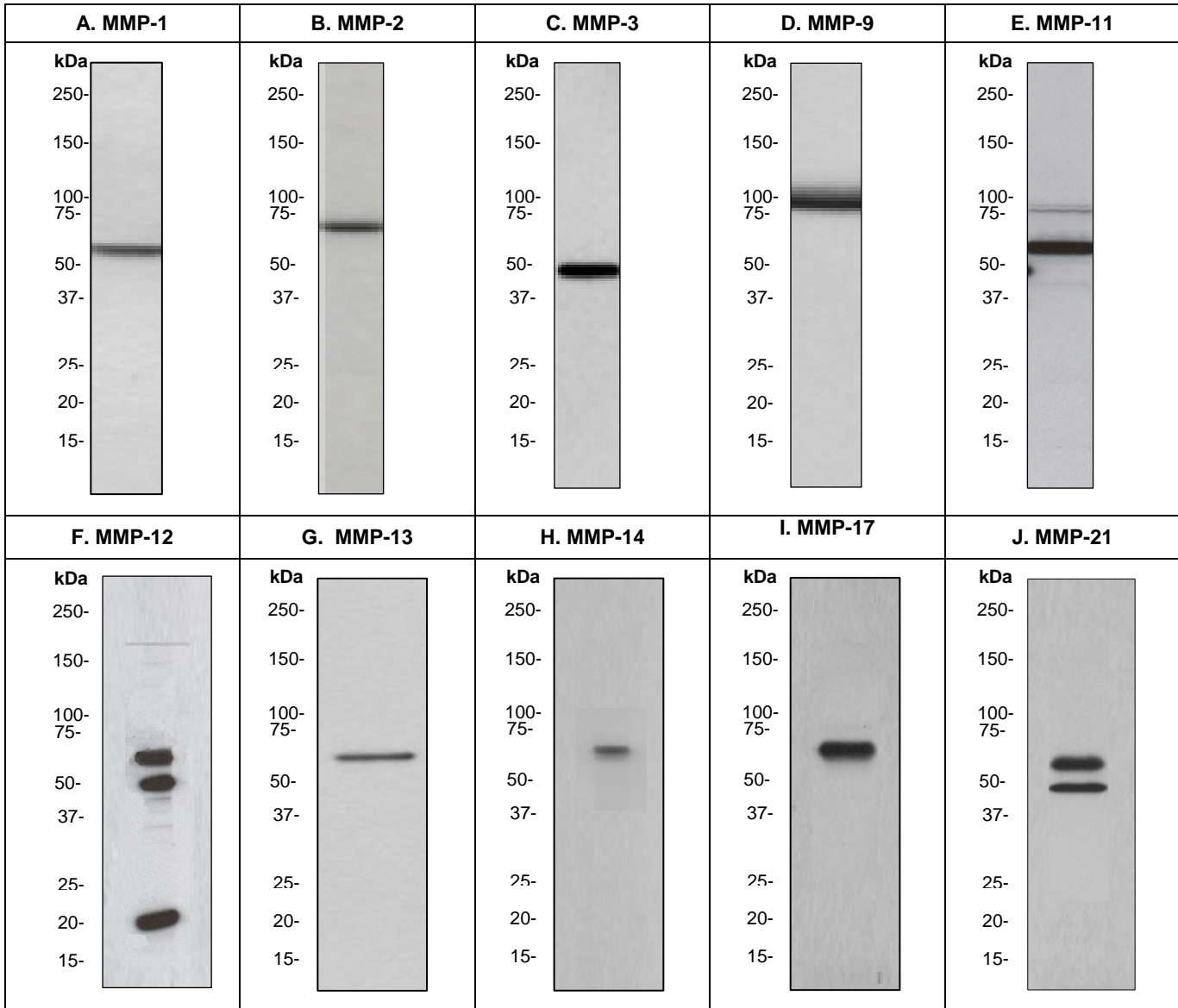
**Recommended Assay Condition and Protocols:**

For recommended protocol and condition, please refer to “tech” section at [www.epitomics.com](http://www.epitomics.com)

**For research use only. Not for use in diagnostic or therapeutic applications.**

This product was manufactured under U.S. Patent No. 5,675,063. For a complete list of protocols and available related products, please visit [www.epitomics.com](http://www.epitomics.com).

**Sample Test Results:**



**Figure 1: Detection of MMP antigens with Western Blotting Analysis** on: A,) SKBr-3 cell lysate with anti-MMP-1 Rabbit mAb; B) A431 cell lysate with anti-MMP2 Rabbit PAb; C) A431 cell lysate with anti-MMP3 Rabbit mAb; D) on A431 cell lysate with anti-MMP-9 Rabbit mAb; E), on A431 cell lysate with anti-MMP-11 Rabbit mAb; F) MCF-7 cell lysate with anti-MMP-12 Rabbit mAb; G) Hela cell lysate with anti-MMP-13 Rabbit mAb; H) A431 cell lysate with anti-MMP14 Rabbit mAb; I) on Hela cell lysate (treated with conA) with anti-MMP17 Rabbit mAb; J) MCF-7 cell lysate with anti-MMP-21 Rabbit mAb. All testing were done at recommended dilutions and conditions. *Please visit [www.epitomics.com](http://www.epitomics.com) for recommended protocols*

**Related Products:**

<u>Antigen</u>	<u>Clone</u>	<u>Catalog</u>
MMP-1	EP1249Y	1976-1
MMP-2	EP1183Y	1948-1
MMP-2 (Pro)	EP1329Y	2008-1
MMP-3	EP1186Y	1908-1
MMP-9	EP1255Y	1939-1
MMP-11	EP1259Y	1881-1
MMP-12	EP1261Y	1906-1
MMP-13	EP1263Y	1923-1
MMP-14	EP1264Y	2010-1
MMP-17	EP1270Y	2011-1
MMP-21	EP1277Y	1955-1

**References:**

1. Pei D, et al. *Nature* 375(6528):244-247, 1995.
2. Harper E et al. *Biochemistry* 10(16):3035-3041, 1971.
3. Drummond A et al. *Annals of the New York Academy of Sciences* 878:228-235, 1999

Product QC'd by: \_\_\_\_\_

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