novex®
by life technologies™

ABfinity™ MMP-16 Recombinant Rabbit Monoclonal Antibody

Publication Number: MAN0007176 **Rev.** 1.00

Catalog Number: 701306 **Store at 2°C to 8°C (short-term), or –20°C (long-term)**

Clonality:	Monoclonal	**Host/Class**:	Rabbit IgG
Concentration:	0.5 mg/mL	**Reactivity**:	Human MMP-16
Quantity:	100 µg	**Predicted Reactivity**:	Human
Volume:	200 µL		

Product Description

Matrix metallopeptidase 16 (MMP-16) belongs to the matrix metalloproteinase peptidase M10A subfamily. It is activated through serine protease cleavage, and is involved with degradation of the extracellular matrix (ECM) during embryonic development, reproduction, and tissue remodeling. MMP-16 is also involved in the ECM degradation processes associated with arthritis and metastasis. In humans, MMP-16 is a part of a cluster of MMP genes at the 11q22.3 locus.

Product Specifications

Immunogen:	Recombinant protein corresponding to amino acids 121–545 of human MMP-16
Alternate Names:	MMPX2, MT-MMP-3
Apparent MW:	52 kDa
Gene ID:	4352
Protein Accession No.:	P51512
Sequence Identity:	Human
Sequence Homology:	Mouse, Rat, Monkey, Rabbit
Clone/PAD:	13H7L7
Lot:	See product label

Product Applications

Application	Species	Test Material	Concentration
Western blotting	Human	Jurkat, and MDAMB-231 cells	2–3 µg/mL
Indirect ELISA	Human	Recombinant protein	1.5×10^{-4} to 3 µg/mL
Immunocyto chemistry	Human	HeLa cells	1 µg/mL
Flow cytometry	Human	HeLa cells	5 µg/mL

Stability

When stored as instructed, expires one year from date of receipt unless otherwise indicated on product label.

Storage and Handling

Store the antibody at 2°C to 8°C for up to 1 month, –20°C for long storage. Avoid repeated freezing and thawing.

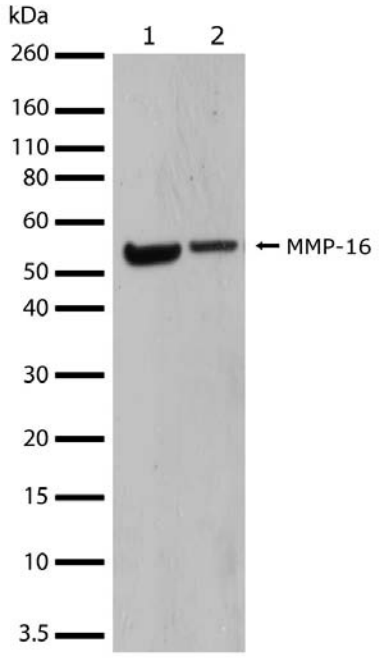

Figure 1 Western blot analysis of ABfinity™ MMP-16 Recombinant Rabbit Monoclonal Antibody (Cat. no. 701306).

Western blot analysis was performed on whole cell extracts from Jurkat cells **(lane 1)** and MDAMB-231 cells **(lane 2)**. Endogenous levels of MMP-16 was detected at ~52 kDa using ABfinity™ MMP-16 Recombinant Rabbit Monoclonal Antibody at a concentration of 2 µg/mL. The blot was developed using enhanced chemiluminescence (ECL) method.

Storage Buffer

Phosphate buffered saline (PBS) with 0.09% sodium azide.

Caution: Sodium azide is extremely toxic and may react with lead and copper plumbing to form highly explosive metal azides. Properly dispose of solutions containing sodium azide. Read the Safety Data Sheets (SDSs) and follow the handling instructions. Wear appropriate protective eyewear, clothing, and gloves. SDSs are available at **www.lifetechnologies.com/support**.

Manufacturing Site • 7335 Executive Way • Frederick • MD 21704 • E-mail: techsupport@lifetech.com

Product Documentation

To obtain a Certificate of Analysis or SDS, visit **www.lifetechnologies.com/support**.

Related Products

Product Name	Quantity	Catalog No.
iBlot® Dry Blotting System	1 unit	IB1001
WesternBreeze® Chromogenic Kit Anti-Rabbit	1 kit	WB7105
WesternBreeze® Chemiluminescent Kit, Anti-Rabbit	1 kit	WB7106

Limited Product Warranty

Life Technologies Corporation and/or its affiliate(s) warrant their products as set forth in the Life Technologies' General Terms and Conditions of Sale found on Life Technologies' website at **www.lifetechnologies.com/termsandconditions**. If you have any questions, please contact Life Technologies at **www.lifetechnologies.com/support**.

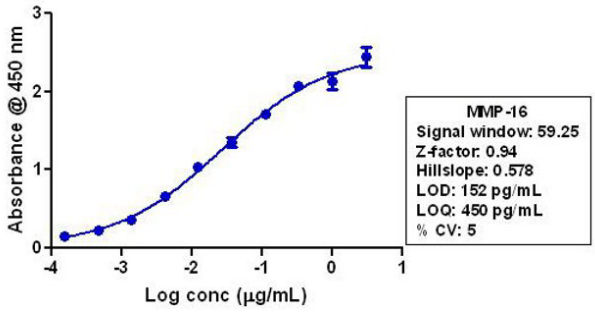

Figure 2 Indirect ELISA of ABfinity™ MMP-16 Recombinant Rabbit Monoclonal Antibody (Cat. no. 701306).

Indirect ELISA was performed using various dilutions of ABfinity™ MMP-16 Recombinant Rabbit Monoclonal Antibody to detect MMP-16 protein coated onto the plate. A non-linear regression analysis was performed (4 PL), and LOD and LOQ for the antibody was determined.

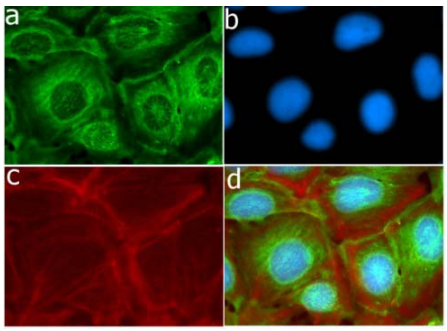

Figure 3 Immunocytochemistry analysis of ABfinity™ MMP-16 Recombinant Rabbit Monoclonal Antibody (Cat. no. 701306).

Immunocytochemistry analysis of HeLa cells stained with ABfinity™ MMP-16 Recombinant Rabbit Monoclonal Antibody, using **a:** Alexa Fluor® 488 goat anti-rabbit as a secondary antibody (green). **b**: DAPI stained HeLa nuclei (blue). **c:** Actin stained with Alexa Fluor® 594 phalloidin (red). **d**: Composite image of cells showing nuclear localization of MMP-16.

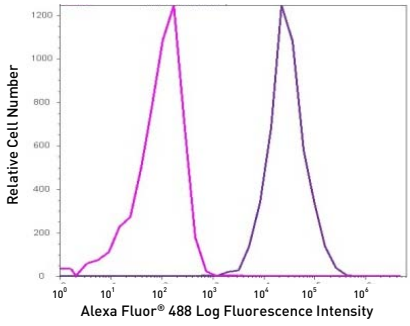

Figure 4 Flow cytometry analysis of HeLa cells labelled with ABfinity™ MMP-16 Recombinant Rabbit Monoclonal Antibody (Cat. no. 701306).

Fixed and permeabilized HeLa cells that were stained with ABfinity™ MMP-16 Recombinant Rabbit Monoclonal Antibody, followed by Alexa Fluor 488® goat anti-Rabbit Ig, are indicated by peak shift **(right peak).** To confirm specificity, the cells were also stained with Alexa Fluor 488® without the MMP-16 antibody **(left peak)**.

Explanation of symbols

Symbol	Description	Symbol	Description	Symbol	Description
	Manufacturer	REF	Catalog number	LOT	Batch code
	Use by		Temperature limitation		
	Consult instructions for use		Caution, consult accompanying documents		

Limited Use Label License No. 327: Recombinant Antibody Technology

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