

Datasheet for 600-401-P76**MMP16 Antibody****Overview**

Description:	Anti-MMP16 (RABBIT) Antibody - 600-401-P76
Item No.:	600-401-P76
Size:	100 µg
Applications:	IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	The matrix metalloproteinase 16(MMP16) protein consists of 604 amino acids and has a characteristic MMP domain structure, which gene is mapped on human chromosome 8q21. Additionally, MMP16 has a C-terminal extension containing a potential transmembrane domain, similar to MMP14 , MMP15 , and MMP17. Furthermore, it is membrane-bound and is a member of the membrane-type MMPs that are a subclass in the MMP family since the other members lack a C-terminal transmembrane domain and are secreted as soluble forms. MMP16 is expressed as a 12-kb transcript in brain, placenta, heart, and some carcinoma cell lines, but is not detectably expressed in lung, kidney, liver, spleen, and muscle. This antibody is suitable for researchers interested in cancer research.
Synonyms:	MMP-X2,Membrane-type matrix metalloproteinase 3,
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	MMP16
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide

Immunogen:	MMP16 affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to a sequence at the C-terminal of human MMP16.
Purity/Specificity:	Anti-MMP16 antibody is directed against human MMP16 protein. The product was affinity purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis was used to suggest reactivity with this protein from human, mouse, and rat based on 100% homology for the immunogen sequence. Cross reactivity with MMP16 from other sources has not been determined.
Relevant Links:	• UniProtKB - P51512 • GeneID - 4325 • NCBI - NP_005932.2

Application Details

Tested Applications:	IHC, WB
Application Note:	Anti-MMP16 is tested for Immunohistochemistry-P, -F, and Western Blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately ~69.5 kDa corresponding to the appropriate cell lysate or extract.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
IHC:	1:100-1:500
WB:	0.5µg/mL

Formulation

Physical State:	Lyophilized
Concentration:	0.5 mg/mL by UV absorbance at 280 nm
Buffer:	0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃
Preservative:	0.05mg Thimerosal
Stabilizer:	5mg BSA
Reconstitution Volume:	100 µL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

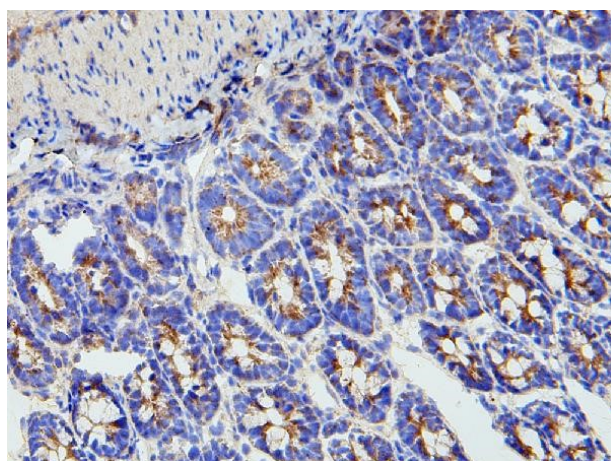
Shipping & Handling

Shipping Condition: Ambient

Storage Condition: Store vial at 4° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

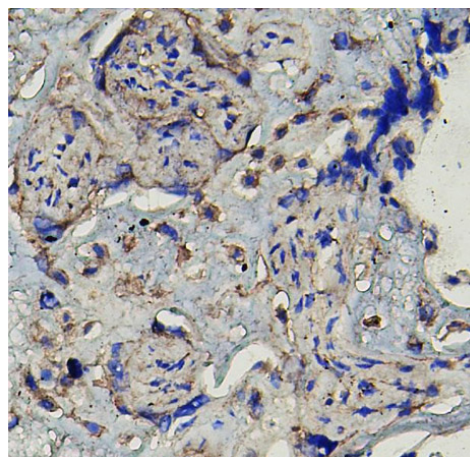
Expiration: Expiration date is one (1) year from date of receipt.

Images



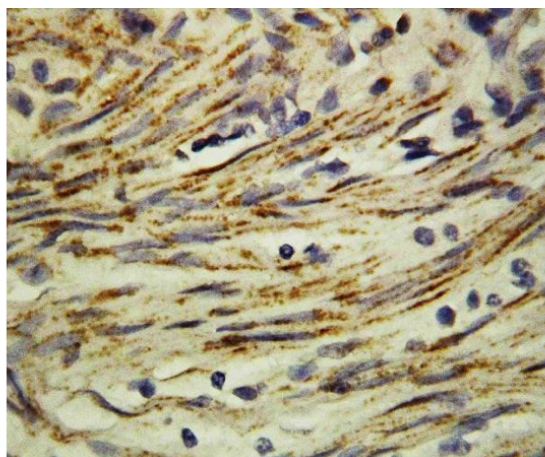
Immunohistochemistry

Immunohistochemistry analysis of MMP16 using anti-MMP16 antibody. MMP16 was detected in frozen section of rat intestine tissues. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1µg/ml rabbit anti-MMP16 Antibody overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



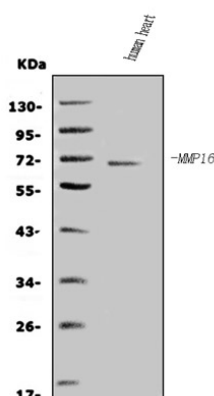
Immunohistochemistry

Immunohistochemistry analysis of MMP16 using anti-MMP16 antibody. MMP16 was detected in frozen section of human placenta tissues. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1µg/ml rabbit anti-MMP16 Antibody overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



Immunohistochemistry

Immunohistochemistry analysis of MMP16 using anti-MMP16 antibody. MMP16 was detected in paraffin-embedded section of human rectal cancer tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 μ g/ml rabbit anti-MMP16 Antibody overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



Western Blot

Western blot analysis of MMP16 using anti-MMP16 antibody. Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 μ g of sample under reducing conditions.

Lane 1: human heart tissue lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with affinity purified rabbit anti-MMP16 antigen polyclonal antibody at 0.5 μ g/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for MMP16 at approximately 70 kDa. The expected band size for MMP16 is at 70 kDa.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.