

Datasheet for ABIN5519039

anti-MMP16 antibody (AA 120-296)**5** Images**2** Publications[Go to Product page](#)

Overview

Quantity:	100 µg
Target:	MMP16
Binding Specificity:	AA 120-296
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This MMP16 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

Product Details

Purpose:	Rabbit IgG polyclonal antibody for MMP16 detection. Tested with WB, IHC-P, Direct ELISA in Human, Mouse, Rat.
Immunogen:	E. coli-derived human MMP16 recombinant protein (Position: Y120-I296).
Isotype:	IgG
Cross-Reactivity (Details):	No cross reactivity with other proteins.
Characteristics:	<p>Rabbit IgG polyclonal antibody for MMP16 detection. Tested with WB, IHC-P, Direct ELISA in Human, Mouse, Rat.</p> <p>Gene Name: matrix metalloproteinase 16</p> <p>Protein Name: Matrix metalloproteinase-16</p>
Purification:	Immunogen affinity purified.

Target Details

Target:	MMP16
Alternative Name:	MMP16 (MMP16 Products)
Background:	<p>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.</p> <p>Synonyms: Matrix metalloproteinase-16, MMP-16, MMP-X2, Membrane-type matrix metalloproteinase 3, MT-MMP 3, MTMMP3, Membrane-type-3 matrix metalloproteinase, MT3-MMP, MT3MMP, MMP16, MMPX2</p>
Gene ID:	4325
UniProt:	P51512

Application Details

Application Notes:	Notes: Tested Species: Species with positive results. Other applications have not been tested. Optimal dilutions should be determined by end users.
Comment:	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (ABIN921124) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P).
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Concentration:	500 µg/mL
Buffer:	Each vial contains 5 mg BSA, 0.9 mg NaCl, 0.2 mg Na2HPO4, 0.05 mg Sodium azide.
Preservative:	Sodium azide

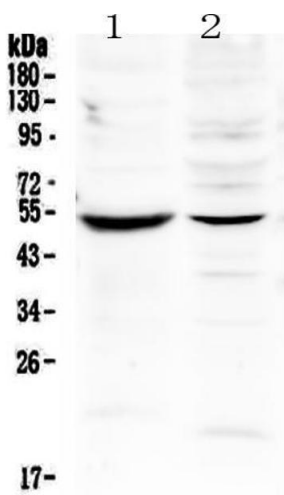
Handling

Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing.

Publications

Product cited in:	Xue, Wu, Chen, Luo: "MT3-MMP down-regulation promotes tumorigenesis and correlates to poor prognosis in esophageal squamous cell carcinoma." in: Cancer medicine , Vol. 5, Issue 9, pp. 2459-68, (2017) (PubMed). Wang, Li, Wu, Wu, Li, Yang, Chen, Xie, Huang, Du, Zhou: "miR-132 can inhibit glioma cells invasion and migration by target MMP16 in vitro." in: OncoTargets and therapy , Vol. 8, pp. 3211-8, (2015) (PubMed).
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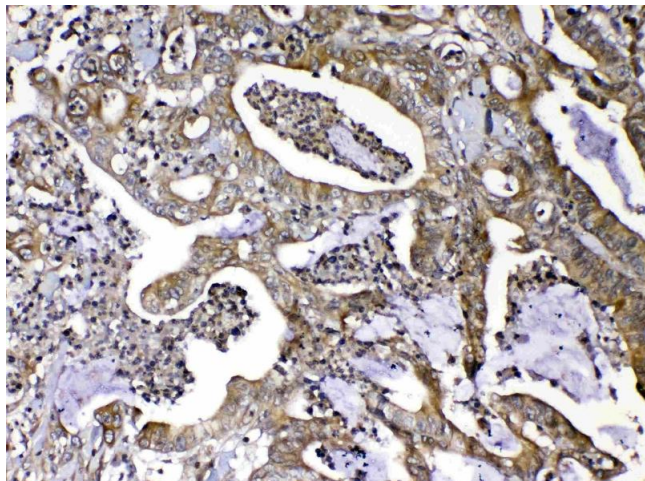
Images



Western Blotting

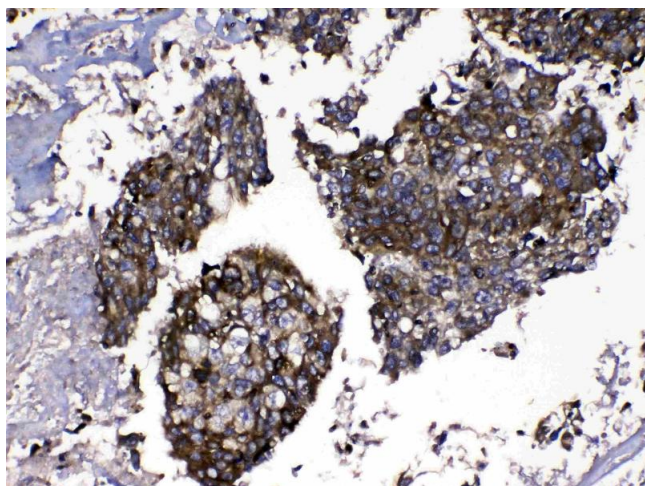
Image 1. Western blot analysis of MMP16 using anti-MMP16 antibody . Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each Lane was loaded with 50ug of sample under reducing conditions. Lane 1: mouse intestine tissue lysates, Lane 2: human SMMC-7721 whole cell lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-MMP16 antigen affinity purified polyclonal antibody (Catalog #) at 0.5 ug/mL overnight at 4â„ƒ, 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 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for MMP16 at approximately 53KD. The expected band size for MMP16 is at 53KD.



Immunohistochemistry

Image 2. IHC analysis of MMP16 using anti-MMP16 antibody .MMP16 was detected in paraffin-embedded section of human colon cancer tissue. 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 1ug/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)(Catalog # SA1022) with DAB as the chromogen.



Immunohistochemistry

Image 3. IHC analysis of MMP16 using anti-MMP16 antibody .MMP16 was detected in paraffin-embedded section of human lung cancer tissue. 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 1ug/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)(Catalog # SA1022) with DAB as the chromogen.

Please check the [product details page](#) for more images. Overall 5 images are available for ABIN5519039.