10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-MMP16 Picoband Antibody

Catalog # ABO13043

Specification

Anti-MMP16 Picoband Antibody - Product Information

Application	**WB, IHC**
Primary Accession	MMP16: P51512
Host	**Rabbit**
Reactivity	**Human, Mouse, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for MMP16 detection. Tested with WB, IHC-P, Direct ELISA in Human;Mouse;Rat.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-MMP16 Picoband Antibody - Additional Information

Application Details
Western blot, 0.1-0.5 µg/ml

 Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml

 Direct ELISA, 0.1-0.5 µg/ml

Subcellular Localization
Isoform Long: Cell membrane ; Localized at the cell surface of melanoma cells.

Tissue Specificity
Expressed in heart, brain, placenta, ovary and small intestine. Isoform Short is found in the ovary.

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen
E. coli-derived human MMP16 recombinant protein (Position: Y120-I296).

Purification
Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins.

Storage	**At -20˚C for one year. After r˚Constitution, 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.**

Anti-MMP16 Picoband Antibody - Protein Information

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-MMP16 Picoband Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-MMP16 Picoband Antibody - Images

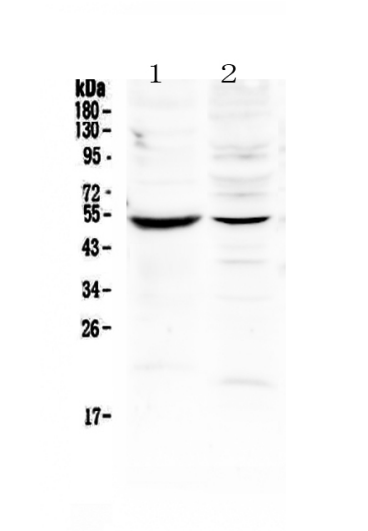

Figure 1. Western blot analysis of MMP16 using anti-MMP16 antibody (ABO13043). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: mouse intestine 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 # ABO13043) 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 with Tanon 5200 system. A specific band was detected for MMP16 at approximately 53KD. The expected band size for MMP16 is at 53KD.

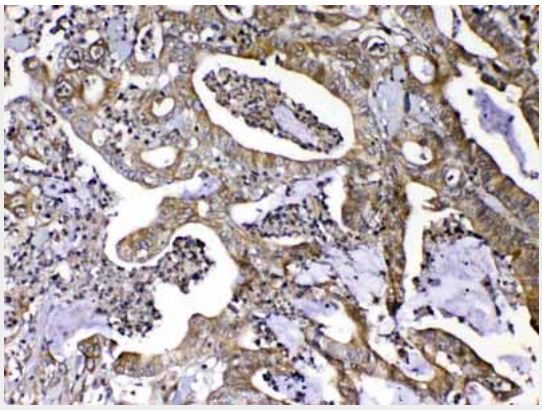

Figure 2. IHC analysis of MMP16 using anti-MMP16 antibody (ABO13043).MMP16 was detected in paraffin-embedded section of human colon cancer tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-MMP16 Antibody (ABO13043) overnight at 4â„ƒ. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37â„ƒ. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

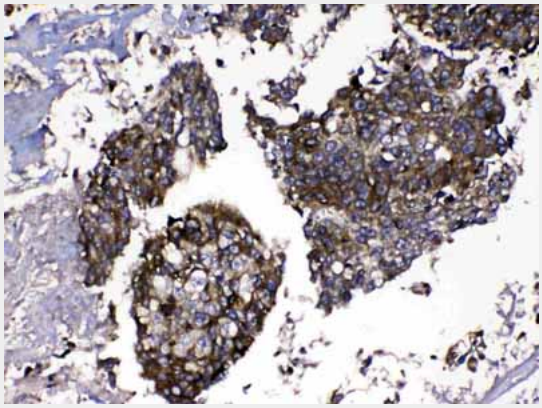

Figure 3. IHC analysis of MMP16 using anti-MMP16 antibody (ABO13043).MMP16 was detected in paraffin-embedded section of human lung cancer tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-MMP16 Antibody (ABO13043) overnight at 4â„ƒ. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37â„ƒ. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

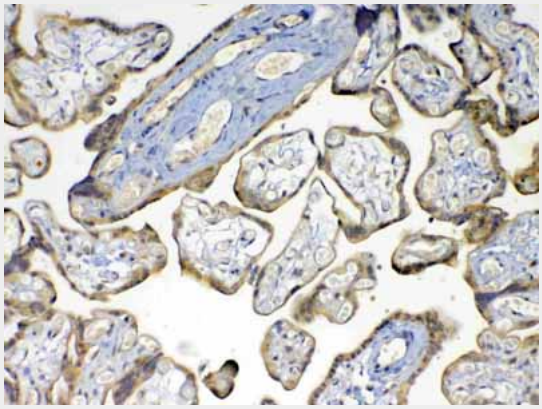

Figure 4. IHC analysis of MMP16 using anti-MMP16 antibody (ABO13043).MMP16 was detected in

paraffin-embedded section of human placenta 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 (ABO13043) overnight at 4â„ƒ. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37â„ƒ. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

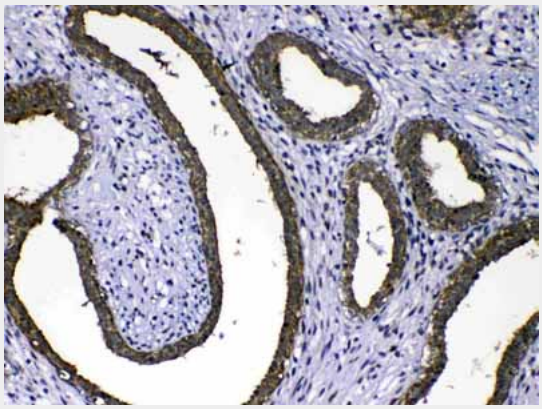

Figure 5. IHC analysis of MMP16 using anti-MMP16 antibody (ABO13043).MMP16 was detected in paraffin-embedded section of human mammary cancer tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-MMP16 Antibody (ABO13043) overnight at 4â„ƒ. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37â„ƒ. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

Anti-MMP16 Picoband Antibody - 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.