

Rabbit MT2-MMP/MMP15 Polyclonal Antibody | anti-MMP15 antibody

Anti-MT2-MMP/MMP15 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA125772	Rabbit	Human, Mouse, Rat	ELISA, Flow Cytometry, Functional Assay, Immunofluorescence, Immunocytochemistry, Western Blot

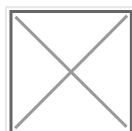
PRODUCT SYNONYMS

MT2-MMP/MMP15; Polyclonal Antibody; Anti-MT2-MMP/MMP15 Antibody; MMP24OS; MMP24-AS1; Protein MMP24OS; MMP24 opposite strand; MMP15 Matrix metalloproteinase-15; MMP-15; Membrane-type matrix metalloproteinase 2; MT-MMP 2; MTMMP2; Membrane-type-2 matrix metalloproteinase; MT2-MMP; MT2MMP; SMCP-2; matrix metalloproteinase 15; anti-MMP15 antibody

PRODUCT SPECIFICATIONS

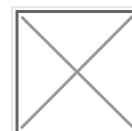
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl and 0.2mg Na2HPO4.
Applicable Applications for anti-MMP15 antibody	ELISA (Direct ELISA), FCM/FACS (Flow Cytometry), IF (Immunofluorescence), ICC (Immunocytochemistry), WB (Western Blot)
Immunogen	E Coli-derived human MT2-MMP/MMP15 recombinant protein (Position: Y132-A202).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Recommended Detection Systems	We recommend Enhanced Chemiluminescent Kit with anti-Rabbit IgG (please inquire) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (please inquire) for ICC.
Preparation and Storage	Store 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 long term. Avoid repeated freezing and thawing.

IMAGES



FCM/FACS (Flow Cytometry)

Figure 3. Flow Cytometry analysis of CACO-2 cells using anti-MT2-MMP/MMP15 antibody (AAA125772). Overlay histogram showing CACO-2 cells stained with AAA125772 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-MT2-MMP/MMP15 Antibody (AAA125772, 1µg/1x10⁶ cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG (5-10µg/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1µg/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



IF (Immunofluorescence)

Figure 2. IF analysis of MT2-MMP/MMP15 using anti-MT2-MMP/MMP15 antibody (AAA125772). MT2-MMP/MMP15 was detected in immunocytochemical section of HEPG2 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5µg/mL rabbit anti-MT2-MMP/MMP15 Antibody (AAA125772) overnight at 4 degree C. DyLight488 Conjugated Goat Anti-Rabbit IgG was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37 degree C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



WB (Western Blot)

Figure 1. Western blot analysis of MT2-MMP/MMP15 using anti-MT2-MMP/MMP15 antibody (AAA125772). 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: human A431 whole cell lysates Lane 2: human HEK293 whole cell lysates Lane 3: human U20S whole cell lysates Lane 4: rat RH35 whole cell lysates Lane 5: mouse liver tissue lysates Lane 6: mouse testis tissue 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-MT2-MMP/MMP15 antigen affinity purified polyclonal antibody (Catalog # AAA125772) at 0.5 µg/mL overnight at 4 degree 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 MT2-MMP/MMP15 at approximately 74KD. The expected band size for MT2-MMP/MMP15 is at 74KD.

ADDITIONAL INFORMATION

Related Product Information for anti-MMP15 antibody	Matrix metalloproteinase 15 also known as MMP15 is an enzyme that in humans is encoded by the MMP15 gene. This gene encodes a member of the peptidase M10 family and membrane-type subfamily of matrix metalloproteinases (MMPs). Proteins in this family are involved in the breakdown of extracellular matrix in normal physiological processes, such as embryonic development, reproduction, and tissue remodeling, as well as in disease processes, such as arthritis and metastasis. Members of this subfamily contain a transmembrane domain suggesting that these proteins are expressed at the cell surface rather than secreted. The encoded preproprotein is proteolytically processed to generate the mature protease. This protein may play a role in cancer progression.
References	<ol style="list-style-type: none">1. Mattei, M. -G., Roeckel, N., Olsen, B. R., Apte, S. S. Genes of the membrane-type matrix metalloproteinase (MT-MMP) gene family, MMP14, MMP15, and MMP16, localize to human chromosomes 14, 16, and 8, respectively. Genomics 40: 168-169, 1997.2. Sato, H., Tanaka, M., Takino, T., Inoue, M., Seiki, M. Assignment of the human genes for membrane-type-1, -2, and -3 matrix metalloproteinases (MMP14, MMP15, and MMP16) to 14q12.2, 16q12.2-q21, and 8q21, respectively, by in situ hybridization. Genomics 39: 412-413, 1997.3. Takino, T., Sato, H., Shinagawa, A., Seiki, M. Identification of the second membrane-type matrix metalloproteinase (MT-MMP-2) gene from a human placenta cDNA library: MT-MMPs form a unique membrane-type subclass in the MMP family. J. Biol. Chem. 270: 23013-23020, 1995.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4505211
NCBI GeneID	4324
NCBI Accession #	NP_002419.1
NCBI GenBank Nucleotide #	NM_002428.2
UniProt Accession #	P51511; Q14111; A0A2U6
NCBI Official Full Name	matrix metalloproteinase-15 preproprotein
NCBI Official Synonym Full Names	matrix metalloproteinase 15 (membrane-inserted)
NCBI Official Symbol	MMP15
NCBI Official Synonym Symbols	MTMMP2; SMCP-2; MT2-MMP
NCBI Protein Information	matrix metalloproteinase-15; MMP-15; MT2MMP; MT-MMP 2; membrane-type matrix metalloproteinase 2; membrane-type-2 matrix metalloproteinase; matrix metalloproteinase 15 (membrane-inserted)
UniProt Protein Name	Matrix metalloproteinase-15

UniProt Gene Name	MMP15
UniProt Synonym Gene Names	MMP-15; MT-MMP 2; MTMMP2; MT2-MMP; MT2MMP
UniProt Entry Name	MMP15_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/mt2-mmp-mmp15-antibody-direct-elisa-flow-cytometry-immunofluorescence-immunocytochemistry-western-blot-elisa/125772>