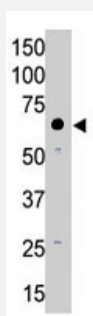


MMP14 polyclonal antibody

Catalog # PAB4782

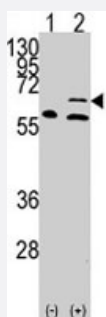
Size 400 uL

Applications



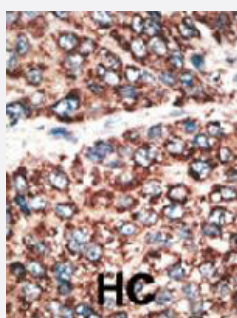
Western Blot (Cell lysate)

The MMP14 polyclonal antibody (Cat # PAB4782) is used in Western blot to detect MMP14 in A-375 cell lysate.



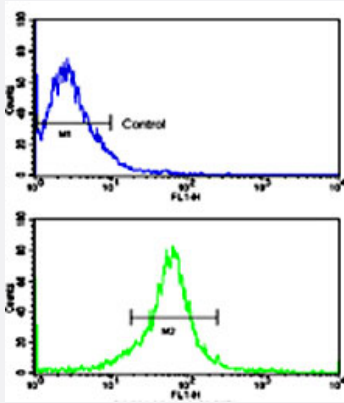
Western Blot (Transfected lysate)

Western blot analysis of MMP14 (arrow) using rabbit MMP14 polyclonal antibody (Cat # PAB4782). 293 cell lysate (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the MMP14 gene (Lane 2) (Origene Technologies).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Formalin-fixed and paraffin-embedded human hepatocellular carcinoma tissue reacted with MMP14 polyclonal antibody (Cat # PAB4782), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. HC = hepatocarcinoma.



Flow Cytometry

Flow cytometric analysis of MCF-7 cells using MMP14 polyclonal antibody (Cat # PAB4782)(bottom histogram) compared to a negative control cell (top histogram).

FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

Specification

Product Description	Rabbit polyclonal antibody raised against synthetic peptide of MMP14.
Immunogen	A synthetic peptide (conjugated with KLH) corresponding to N-terminus of human MMP14.
Host	Rabbit
Reactivity	Human
Form	Liquid
Purification	Protein G purification
Recommend Usage	ELISA (1:1000) Western Blot (1:100-500) Immunohistochemistry (1:50-100) Flow cytometry (1:10-50) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.09% sodium azide)
Storage Instruction	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Western Blot (Cell lysate)

The MMP14 polyclonal antibody (Cat # PAB4782) is used in Western blot to detect MMP14 in A-375 cell lysate.

- Western Blot (Transfected lysate)

Western blot analysis of MMP14 (arrow) using rabbit MMP14 polyclonal antibody (Cat # PAB4782). 293 cell lysate (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the MMP14 gene (Lane 2) (Origene Technologies).

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Formalin-fixed and paraffin-embedded human hepatocellular carcinoma tissue reacted with MMP14 polyclonal antibody (Cat # PAB4782), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. HC = hepatocarcinoma.

- Enzyme-linked Immunoabsorbent Assay

- Flow Cytometry

Flow cytometric analysis of MCF-7 cells using MMP14 polyclonal antibody (Cat # PAB4782)(bottom histogram) compared to a negative control cell (top histogram).

FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

Gene Info — MMP14

Entrez GeneID [4323](#)

Protein Accession# [MM14_HUMAN](#)

Gene Name MMP14

Gene Alias MMP-X1, MT1-MMP, MTMMP1

Gene Description matrix metalloproteinase 14 (membrane-inserted)

Omim ID [600754](#)

Gene Ontology [Hyperlink](#)

Gene Summary Proteins of the matrix metalloproteinase (MMP) 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. Most MMP's are secreted as inactive proproteins which are activated when cleaved by extracellular proteinases. However, the protein encoded by this gene is a member of the membrane-type MMP (MT-MMP) subfamily; each member of this subfamily contains a potential transmembrane domain suggesting that these proteins are expressed at the cell surface rather than secreted. This protein activates MMP2 protein, and this activity may be involved in tumor invasion. [provided by RefSeq]

Other Designations matrix metalloproteinase 14|matrix metalloproteinase 14 (membrane-inserted)|membrane type 1 metalloproteinase|membrane-type matrix metalloproteinase 1|membrane-type-1 matrix metalloproteinase

Publication Reference

- [cDNA sequence and mRNA tissue distribution of a novel human matrix metalloproteinase with a potential transmembrane segment.](#)

Will H, Hinzmann B.

European Journal of Biochemistry 1995 Aug; 231(3):602.

- [Cloning of a human gene potentially encoding a novel matrix metalloproteinase having a C-terminal transmembrane domain.](#)

Takino T, Sato H, Yamamoto E, Seiki M.

Gene 1995 Apr; 155(2):293.

- [Membrane-type matrix metalloproteinase \(MT-MMP\) gene is expressed in stromal cells of human colon, breast, and head and neck carcinomas.](#)

Okada A, Bellocq JP, Rouyer N, Chenard MP, Rio MC, Chambon P, Basset P.

PNAS 1995 Mar; 92(7):2730.

Application: IHC-P, WB-Ce, WB-Ti, Human, Breast fibroadenomas, Breast carcinoma, Cell lines, Colon carcinoma

Pathway

- [GnRH signaling pathway](#)

Disease

- [Adenocarcinoma](#)
- [Bronchopulmonary Dysplasia](#)
- [Cardiovascular Diseases](#)
- [Chorioamnionitis](#)
- [Cleft Lip](#)
- [Cleft Palate](#)
- [Diabetes Mellitus](#)
- [Disease Progression](#)

- [Edema](#)
- [Esophageal Neoplasms](#)
- [Fetal Membranes](#)
- [Genetic Predisposition to Disease](#)
- [Glomerulosclerosis](#)
- [Hepatitis C](#)
- [Liver Cirrhosis](#)
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- [Obstetric Labor](#)
- [Ovarian Neoplasms](#)
- [Pre-Eclampsia](#)
- [Premature Birth](#)
- [Pulmonary Disease](#)
- [Scleroderma](#)