

MMP14 / MT1-MMP Polyclonal antibody

Catalog Number: 14552-1-AP

27 Publications

Basic Information

Catalog Number:

14552-1-AP

Size:

350 µg/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG5965

GenBank Accession Number:

BC064803

GeneID (NCBI):

4323

Full Name:

matrix metalloproteinase 14
(membrane-inserted)

Calculated MW:

66 kDa

Observed MW:

66 kDa, 45-50 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:500-1:2000

IHC 1:50-1:500

IF 1:50-1:500

Applications

Tested Applications:

IF, IHC, WB, ELISA

Cited Applications:

IF, IHC, WB

Species Specificity:

human, mouse, rat

Cited Species:

human, rat, mouse

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : HepG2 cells, A549 cells, COLO 320 cells, human colon tissue

IHC : human ovary tumor tissue,

IF : HepG2 cells, COLO 320 cells

Background Information

MMP14, also named as MT1-MMP, is a key matrix metalloproteinase (MMP) family member which plays a crucial role in tumor growth, invasion and metastasis. MT1-MMP is a cell membrane-bound proteinase, and it enhances degradation of collagen IV, a major component of the basement membrane, by forming a complex with tissue inhibitor of metalloproteinase-2 (TIMP-2) to activate pro-MMP-2. MT1-MMP can influence venous invasion, intrahepatic metastasis, and patient outcome in hepatocellular carcinoma (HCC). MT1-MMP was reported to be present in centromere and could lead to chromosome instability in MDCK cells, indicating that MT1-MMP may have more novel functions in the intracellular compartments. In western blotting, pro-MMP14 (65 kDa) and MMP14 (51 kDa) bands showed with the truncated MMP14 (45, 42, 35, 20 kDa) forms (PMID:12097451).

Notable Publications

Author	Pubmed ID	Journal	Application
Junqing Guo	29499931	Mol Ther Nucleic Acids	WB
Baoxu Lin	34819020	BMC Genomics	WB
Nina Kreß	35682709	Int J Mol Sci	WB

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

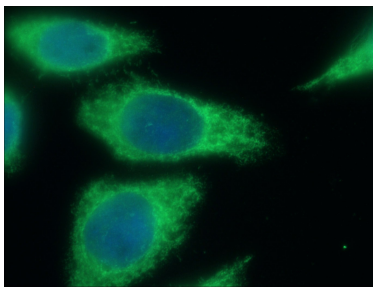
For technical support and original validation data for this product please contact:

T: 4006900926

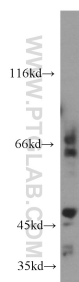
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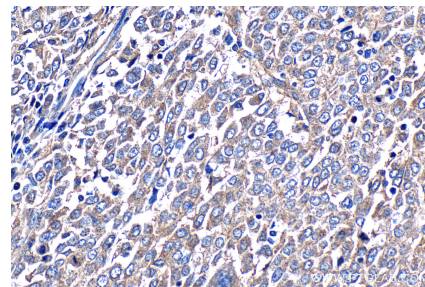
Selected Validation Data



Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using 14552-1-AP (MT1-MMP antibody) at dilution of 1:50 and Alexa Fluor 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



HepG2 cells were subjected to SDS PAGE followed by western blot with 14552-1-AP (MT1-MMP antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human ovary tumor tissue slide using 14552-1-AP (MMP14 / MT1-MMP antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).