

For Research Use Only

MMP14 / MT1-MMP Polyclonal antibody



Catalog Number: 14552-1-AP

27 Publications

Basic Information

Catalog Number: 14552-1-AP	GenBank Accession Number: BC064803	Purification Method: Antigen affinity purification
Size: 350 µg/ml	GeneID (NCBI): 4323	Recommended Dilutions: WB 1:500-1:2000 IHC 1:50-1:500 IF 1:50-1:500
Source: Rabbit	UNIPROT ID: P50281	
Isotype: IgG	Full Name: matrix metalloproteinase 14 (membrane-inserted)	
Immunogen Catalog Number: AG5965	Calculated MW: 66 kDa	
	Observed MW: 66 kDa, 45-50 kDa	

Applications

Tested Applications:
IF/ICC, 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 Kreße	35682709	Int J Mol Sci	WB

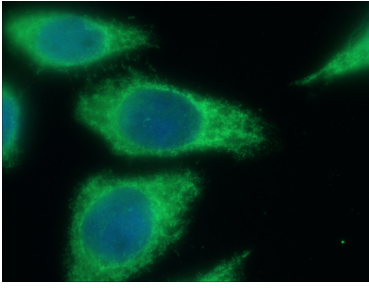
Storage

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

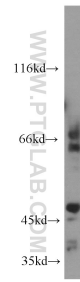
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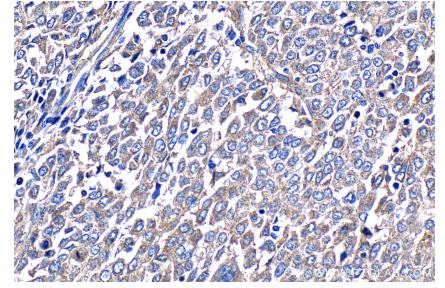
Selected Validation Data



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).