For Research Use Only

MMP14 / MT1-MMP Polyclonal antibody

Catalog Number: 14552-1-AP 32 Publications



Purification Method:

WB 1:500-1:1000 IF/ICC 1:200-1:800

Antigen affinity purification

Recommended Dilutions:

Basic Information

Applications

Catalog Number: 14552-1-AP Concentration: 550 ug/ml

Source:

Rabbit Isotype:

Immunogen Catalog Number:

AG5965

Tested Applications: WB, IF/ICC, ELISA

Cited Applications: WB, IHC, IF

Species Specificity: human, mouse, rat Cited Species: human, mouse, rat

GenBank Accession Number:

BC064803 GeneID (NCBI):

UNIPROT ID: P50281

4323

Full Name:

matrix metallopeptidase 14 (membrane-inserted)

Calculated MW: 66 kDa Observed MW: 66 kDa, 45-50 kDa

Positive Controls:

WB: A549 cells, human colon tissue IF/ICC: 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 $more\ novel\ functions\ in\ the\ intracellular\ compartments.\ In\ western\ blotting,\ pro-MMP14\ (65\ kDa)\ and\ MMP14\ (51\ kDa)\ and$ 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

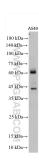
Storage:

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

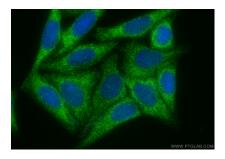
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



A 549 cell lysates were subjected to SDS PAGE followed by western blot with 14552-1-AP (MMP14 / MT1-MMP antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using MMP14 / MT1-MMP antibody (14552-1-AP) at dilution of 1:400 and CoraLite® 488-Conjugated Goat Anti-Rabbit $\lg G(H+L)$ (SA00013-2).