DATASHEET

MMP14 Rabbit Polyclonal Antibody

CAT. NO. APA07275

KEY FEATURES

Target	MMP14	Source / Host	Rabbit
Reactivity	Human, Mouse, Rat, Pig	Clonality	Polyclonal
Applications	WB, IHC, IF/ICC	Conjugation	Unconjugated
Form / Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.	Storage	at-20°C

BACKGROUND

Endopeptidase that degrades various components of the extracellular matrix such as collagen . Essential for pericellular collagenolysis and modeling of skeletal and extraskeletal connective tissues during development . Activates progelatinase A/MMP2, thereby acting as a positive regulator of cell growth and migration . Involved in the formation of the fibrovascular tissues in association with pro-MMP2 . May be involved in actin cytoskeleton reorganization by cleaving PTK7 . Acts as a regulator of Notch signaling by mediating cleavage and inhibition of DLL1 . Cleaves ADGRB1 to release vasculostatin-40 which inhibits angiogenesis . Acts as a negative regulator of the GDF15-GFRAL aversive response by mediating cleavage and inactivation of GFRAL .

APPLICATION

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:1000
IHC	1:100 - 1:200
IF/ICC	1:50 - 1:200

*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

PRODUCT OVERVIEW

Description	Rabbit polyclonal antibody to MMP14
Specificity	Recognizes endogenous levels of MMP14 protein.
Antibody Type	Primary antibody
Immunogen	KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human MMP14. The exact sequence is proprietary.
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 65 kD; Observed: 63 kD
Form/Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Alternative Names	Matrix metalloproteinase-14; MMP-14; MMP-X1; Membrane-type matrix metalloproteinase 1; MT-MMP 1; MTMMP1; Membrane-type-1 matrix metalloproteinase; MT1-MMP; MT1MMP
Gene Symbol	MMP14
Entrez Gene	4323(Human); 17387(Mouse); 81707(Rat)
SwissProt	P50281(Human); P53690(Mouse); Q10739(Rat)

*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact info@arexbio.com or your local distributor.

*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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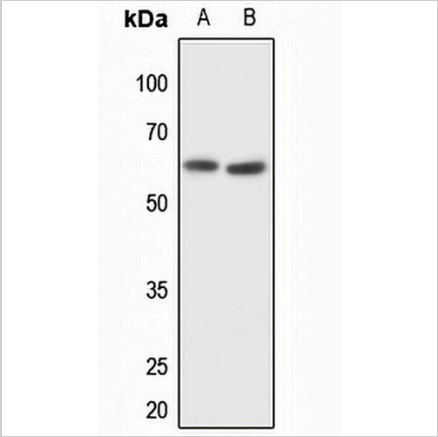
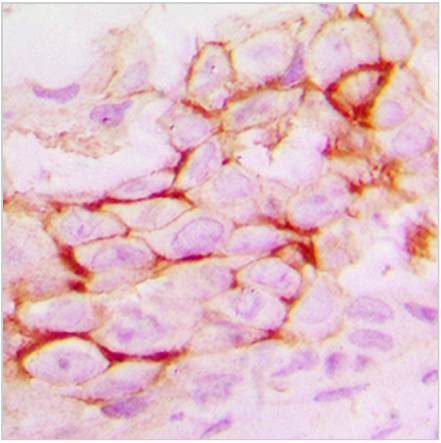
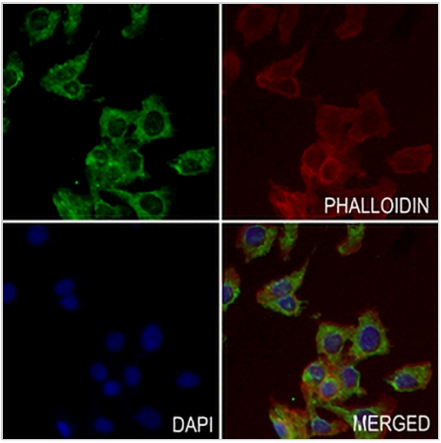
DATA



Western blot analysis of MMP14 expression in mouse brain (A), rat brain (B) whole cell lysates. (Predicted band size: 65 kD; Observed band size: 63 kD)



Immunohistochemical analysis of MMP14 staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of MMP14 staining in HepG2 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AREX® Fluor 488 -conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AREX® Fluor 594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

STORAGE

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

NOTE

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.