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Anti-MMP14 Antibody

Catalog # AP51350

Product Information

Application	WB
Primary Accession	P50281
Reactivity	Human, Mouse, Rat, Rabbit, Pig, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	65894

Additional Information

Gene ID	4323
Other 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
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human MMP14. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000)
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

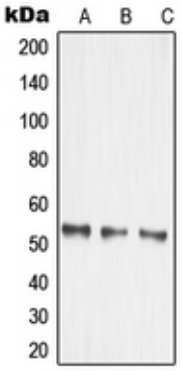
Name	MMP14
Function	Endopeptidase that degrades various components of the extracellular matrix such as collagen (PubMed:8015608). Essential for pericellular collagenolysis and modeling of skeletal and extraskeletal connective tissues during development (By similarity). Activates progelatinase A/MMP2, thereby acting as a positive regulator of cell growth and migration (PubMed:22065321, PubMed:8015608). Involved in the formation of the fibrovascular tissues in association with pro-MMP2 (PubMed:12714657, PubMed:22065321). May be involved in actin cytoskeleton reorganization by cleaving PTK7 (PubMed:20837484). Acts as a regulator of Notch signaling by mediating cleavage and inhibition of DLL1 (PubMed:21572390). Cleaves ADGRB1 to release vasculostatin-40 which inhibits angiogenesis (PubMed:22330140). Acts as a negative regulator of the GDF15-GFRAL aversive response by mediating cleavage and inactivation of GFRAL (PubMed:35177851).

Cellular Location	Cell membrane; Single-pass type I membrane protein. Melanosome. Cytoplasm Note=Identified by mass spectrometry in melanosome fractions from stage I to stage IV (PubMed:17081065). Forms a complex with BST2 and localizes to the cytoplasm (PubMed:17081065)
Tissue Location	Expressed in stromal cells of colon, breast, and head and neck. Expressed in lung tumors.

References

Sato H.,et al.Nature 370:61-65(1994).
Takino T.,et al.Gene 155:293-298(1995).
Okada A.,et al.Proc. Natl. Acad. Sci. U.S.A. 92:2730-2734(1995).
Will H.,et al.Eur. J. Biochem. 231:602-608(1995).
Luo G.-X.,et al.Submitted (NOV-1995) to the EMBL/GenBank/DDBJ databases.

Images



Western blot analysis of MMP14 expression in HEK293T (A), mouse kidney (B), rat brain (C) whole cell lysates. (Predicted band size: 65 kD; Observed band size: 53 kD)

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.