

# Cleaved-MMP-14 (Y112) Polyclonal Antibody

Catalog # AP63136

# **Product Information**

| Application       | WB                |
|-------------------|-------------------|
| Primary Accession | <u>P50281</u>     |
| Reactivity        | Human, Mouse, Rat |
| Host              | Rabbit            |
| Clonality         | Polyclonal        |
| Calculated MW     | 65894             |

### **Additional Information**

| Gene ID            | 4323  |
|--------------------|---|
| Other Names        | MMP14; Matrix metalloproteinase-14; MMP-14; MMP-X1; Membrane-type<br>matrix metalloproteinase 1; MT-MMP 1; MTMMP1; Membrane-type-1 matrix<br>metalloproteinase; MT1-MMP; MT1MMP |
| Dilution           | WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/20000. Not yet tested in other applications.   |
| Format             | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.   |
| Storage Conditions | -20°C   |

#### **Protein Information**

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

## Background

Endopeptidase that degrades various components of the extracellular matrix such as collagen. Activates progelatinase A. Essential for pericellular collagenolysis and modeling of skeletal and extraskeletal connective tissues during development (By similarity). May be involved in actin cytoskeleton reorganization by cleaving PTK7 (PubMed:<u>20837484</u>). Acts as a positive regulator of cell growth and migration via activation of MMP15. Involved in the formation of the fibrovascular tissues in association with pro-MMP2 (PubMed:<u>12714657</u>). Cleaves ADGRB1 to release vasculostatin-40 which inhibits angiogenesis (PubMed:<u>22330140</u>).

## Images



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