

KD-Validated Anti-Matrix metallopeptidase 14 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody Catalog # AGI1260

Specification

KD-Validated Anti-Matrix metallopeptidase 14 Rabbit Monoclonal Antibody - Product Information

Application WB, FC Primary Accession P50281

Reactivity
Ronoclonal Isotype
Rat, Human
Ronoclonal Rabbit IgG

Calculated MW Predicted, 66 kDa , observed, 65 kDa KDa

Gene Name MMP14

Aliases MMP14; Matrix Metallopeptidase 14; MT1-MMP; Matrix Metallopeptidase 14

(Membrane-Inserted); Membrane-Type-1
Matrix Metalloproteinase; Membrane Type

1 Metalloprotease; Matrix

Metalloproteinase-14; EC 3.4.24.80; MT-MMP 1; MMP-14; MMP-X1; MT1MMP; MTMMP1; Matrix Metalloproteinase 14 (Membrane-Inserted); Membrane Type

1-Matrix Metalloproteinase;

Membrane-Type Matrix Metalloproteinase

1; EC 3.4.24; MT-MMP; WNCHRS

Immunogen A synthesized peptide derived from human

MMP14

KD-Validated Anti-Matrix metallopeptidase 14 Rabbit Monoclonal Antibody - Additional Information

Gene ID 4323

Other Names

Matrix metalloproteinase-14, MMP-14, 3.4.24.80, MMP-X1, Membrane-type matrix metalloproteinase 1, MT-MMP 1, MTMMP1, Membrane-type-1 matrix metalloproteinase, MT1-MMP, MT1MMP, MMP14

KD-Validated Anti-Matrix metallopeptidase 14 Rabbit Monoclonal Antibody - 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

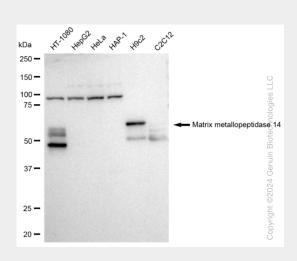
Expressed in stromal cells of colon, breast, and head and neck. Expressed in lung tumors.

KD-Validated Anti-Matrix metallopeptidase 14 Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

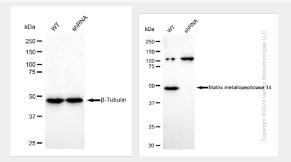
KD-Validated Anti-Matrix metallopeptidase 14 Rabbit Monoclonal Antibody - Images



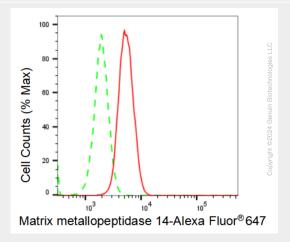
Western blotting analysis using anti-Matrix metallopeptidase 14 antibody (Cat#AGI1260). Total



cell lysates (30 μ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-Matrix metallopeptidase 14 antibody (Cat#AGI1260, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Western blotting analysis using anti-Matrix metallopeptidase 14 antibody (Cat#AGI1260). Matrix metallopeptidase 14 expression in wild type (WT) and matrix metallopeptidase 14 shRNA knockdown (KD) HeLa cells with 30 μg of total cell lysates. β -Tubulin serves as a loading control. The blot was incubated with anti-Matrix metallopeptidase 14 antibody (Cat#AGI1260, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of Matrix metallopeptidase 14 expression in H9c2 cells using Matrix metallopeptidase 14 antibody (Cat#AGI1260, 1:2,000). Green, isotype control; red, Matrix metallopeptidase 14.