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**Product Name: Cleaved-MMP-12 (G106) Rabbit Polyclonal Antibody****Catalog #: APRab09010**

For research use only.

**Summary**

<b>Description</b>	Rabbit polyclonal Antibody
<b>Host</b>	Rabbit
<b>Application</b>	WB,ELISA
<b>Reactivity</b>	Human,Rat,Mouse
<b>Conjugation</b>	Unconjugated
<b>Modification</b>	Unmodified
<b>Isotype</b>	IgG
<b>Clonality</b>	Polyclonal
<b>Form</b>	Liquid
<b>Concentration</b>	1mg/ml
<b>Storage</b>	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
<b>Shipping</b>	Ice bags
<b>Buffer</b>	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
<b>Purification</b>	Affinity purification

**Application**

<b>Dilution Ratio</b>	WB 1:500-1:2000,ELISA 1:10000-1:20000
<b>Molecular Weight</b>	42kDa

**Antigen Information**

<b>Gene Name</b>	MMP12
<b>Alternative Names</b>	MMP12; HME; Macrophage metalloelastase; MME; Macrophage elastase; ME; hME; Matrix metalloproteinase-12; MMP-12
<b>Gene ID</b>	4321.0
<b>SwissProt ID</b>	P39900
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human MMP12. AA range:87-136

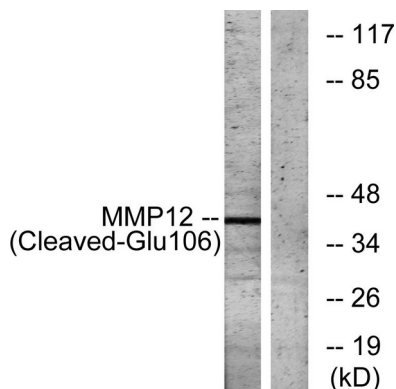
**Background**

This gene encodes a member of the peptidase M10 family of matrix metalloproteinases (MMPs). Proteins in this family are involved in the breakdown of extracellular matrix in normal physiological processes, such as embryonic development, reproduction, and tissue remodeling, as well as in disease processes, such as arthritis and metastasis. The encoded preproprotein is proteolytically processed to generate the mature protease. This protease degrades soluble and insoluble elastin. This gene may play a role in aneurysm formation and mutations in this gene are associated with lung function and chronic obstructive pulmonary disease (COPD). This gene is part of a cluster of MMP genes on chromosome 11. [provided by RefSeq, Jan 2016],catalytic activity:Hydrolysis of soluble and insoluble elastin. Specific cleavages are also produced at 14-Ala-|-Leu-15 and 16-Tyr-|-Leu-17 in the B chain of insulin.,cofactor:Binds 2 zinc ions per subunit.,cofactor:Binds 4 calcium ions per subunit.,domain:The conserved cysteine present in the cysteine-switch motif binds the catalytic zinc ion, thus inhibiting the enzyme. The dissociation of the cysteine from the zinc ion upon the activation-peptide release activates the enzyme.,function:May be involved in tissue injury and remodeling. Has significant elastolytic activity. Can accept large and small amino acids at the P1' site, but has a preference for leucine. Aromatic or hydrophobic residues are preferred at the P1 site, with small hydrophobic residues (preferably alanine) occupying P3.,induction:By exposure to lipopolysaccharide. Inhibited by dexamethasone.,similarity:Belongs to the peptidase M10A family.,similarity:Contains 4 hemopexin-like domains.,tissue specificity:Found in alveolar macrophages but not in peripheral blood monocytes,

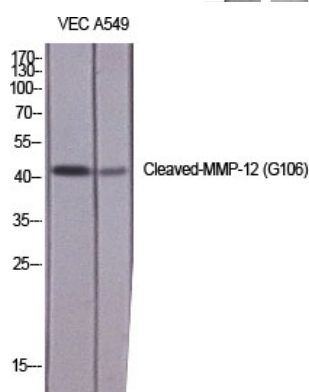
## Research Area

Angiogenesis

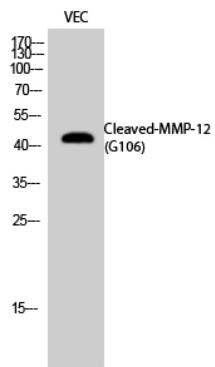
## Image Data



Western blot analysis of lysates from NIH/3T3 cells, treated with etoposide 25uM 1h, using MMP12 (Cleaved-Glu106) Antibody. The lane on the right is blocked with the synthesized peptide.



Western blot analysis of various cells using Cleaved-MMP-12 (G106) Polyclonal Antibody diluted at 1: 1000



Western Blot analysis of VEC cells using Cleaved-MMP-12 (G106) Polyclonal Antibody diluted at 1: 1000