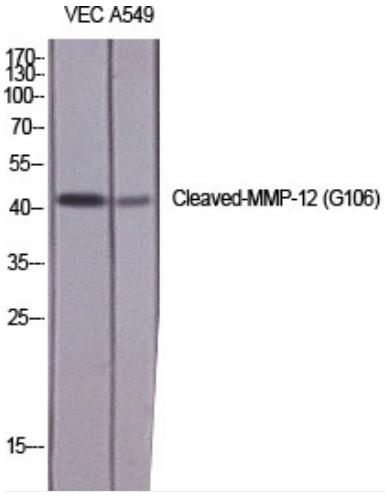
Cleaved-MMP-12 (G106) Polyclonal Antibody

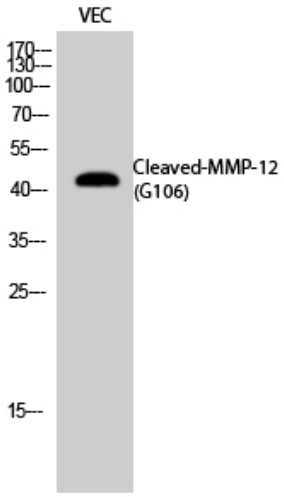
Catalog No	YP-Ab-02291
Isotype	IgG
Reactivity	Human;Rat;Mouse;
Applications	WB;ELISA
Gene Name	MMP12
Protein Name	Macrophage metalloelastase
Immunogen	The antiserum was produced against synthesized peptide derived from human MMP12. AA range:87-136
Specificity	Cleaved-MMP-12 (G106) Polyclonal Antibody detects endogenous levels of fragment of activated MMP-12 protein resulting from cleavage adjacent to G106.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Western Blot: 1/500 - 1/2000. ELISA: 1/20000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	MMP12; HME; Macrophage metalloelastase; MME; Macrophage elastase; ME; hME; Matrix metalloproteinase-12; MMP-12
Observed Band	42kD
Cell Pathway	Secreted, extracellular space, extracellular matrix .
Tissue Specificity	Found in alveolar macrophages but not in peripheral blood monocytes.
Function	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 p

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],
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

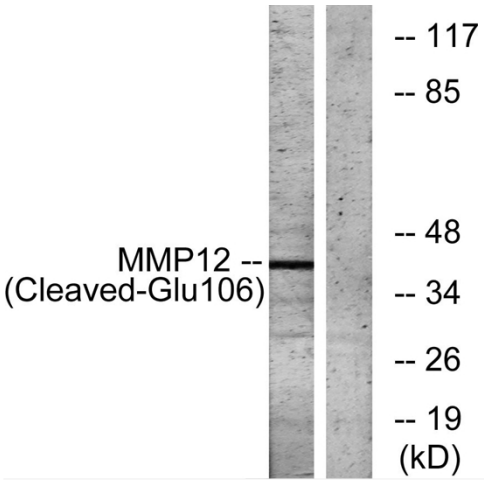
Products Images



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



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.