Product name:	MMP-16 Rabbit Polyclonal Antibody
Cat number:	ABN13983
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from human MMP-16. AA range:551-600
Reactivity:	Human,Mouse,Rat
Applications:	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:5000-1:20000
Molecular Weight:	70kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

Background:

Proteins of the matrix metalloproteinase (MMP) 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. Most MMP's are secreted as inactive proproteins which are activated when cleaved by extracellular proteinases. The encoded protein activates MMP2 by cleavage. This gene was once referred to as MT-MMP2, but was renamed as MT-MMP3 or MMP16. [provided by RefSeq, Oct 2010],cofactor:Binds 1 zinc ion per subunit.,cofactor:Calcium.,developmental stage:Expressed in tissues undergoing reconstruction. Present in fetal tissues, especially in brain. Expression seems to decline with advanced development.,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.,enzyme regulation:TIMP-2 shows little inhibitory activity compared to TIMP-1. TIMP-1 seems to have less binding affinity than TIMP-2 for the short isoform.,function:Endopeptidase that degrades various components of the extracellular matrix, such as collagen type III and fibronectin. Activates progelatinase A. Involved in the matrix remodeling of blood vessels. The short isoform cleaves fibronectin and also collagen type III, but at lower rate. It has no effect on type I, II, IV and V collagen. However, upon interaction with CSPG4, it may be involved in degradation and invasion of type I collagen by melanoma cells.,PTM:The precursor is cleaved by a furin endopeptidase.,similarity:Belongs to the peptidase M10A family.,similarity:Contains 4 hemopexin-like domains.,subcellular location:Localized at the cell surface of melanoma cells.,subunit:Interacts with CSPG4 through CSPG4 chondroitin sulfate glycosaminoglycan.,tissue specificity:Expressed in heart, brain, placenta, ovary and small intestine. The short isoform is found in the ovary.,