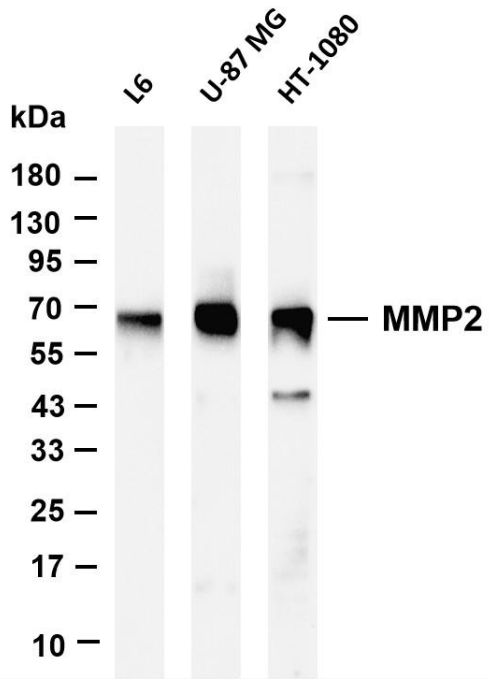
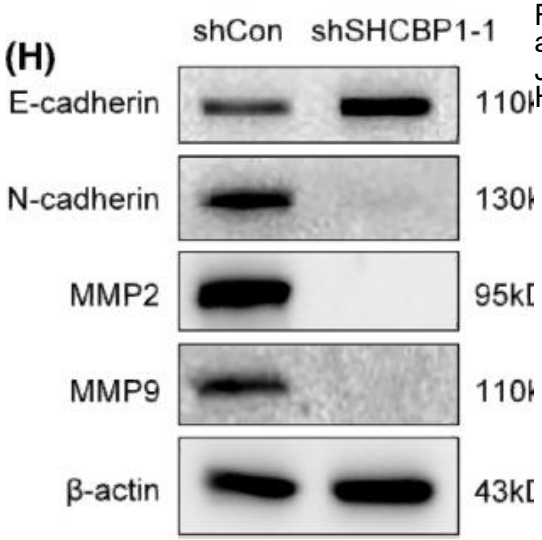
MMP2 Rabbit mAb

Catalog No	YP-rAb-17627
Isotype	IgG
Reactivity	Human,Mouse,Rat
Applications	WB,IF,ELISA
Gene Name	MMP2
Protein Name	72 kDa type IV collagenase
Purification Process	Protein A
Specificity	Endogenous
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Monoclonal, Rabbit,IgG
Dilution	WB 1:2000-1:10000; IF 1:200-1:1000; ELISA 1:5000-1:20000;
Concentration	0.5 mg/ml
Purity	≥90%
Storage Stability	-15° C to -25° C/1 year(Do not lower than -25° C)
Synonyms	MMP2 ; CLG4A ; 72 kDa type IV collagenase ; 72 kDa gelatinase ; Gelatinase A ; Matrix metalloproteinase-2 ; MMP-2 ; TBE-1
Observed Band	64kD
Calculated Molecular Weight	74kD
Cell Pathway	Cytoplasm, Nucleus
Tissue Specificity	Produced by normal skin fibroblasts. PEX is expressed in a number of tumors including gliomas, breast and prostate.
Function	Catalytic activity:Cleavage of gelatin type I and collagen types IV, V, VII, X. Cleaves the collagen-like sequence Pro-Gln-Gly-|-Ile-Ala-Gly-Gln.,cofactor:Binds 2 zinc ions per subunit.,cofactor:Binds 4 calcium ions per subunit.,Disease:Defects in MMP2 are the cause of Torg-Winchester syndrome [MIM:259600]; also called multicentric osteolysis nodulosis and arthropathy (MONA). Torg-Winchester syndrome is an autosomal recessive osteolysis syndrome. It is severe with generalized osteolysis and osteopenia. Subcutaneous nodules are usually absent. Torg-Winchester syndrome has been associated with a number of additional features including coarse face, corneal opacities, patches of thickened, hyperpigmented skin, hypertrichosis and gum hypertrophy. However, these features are not always present and have occasionally been observed in other osteolysis syndromes.,Domain:The conserved cysteine present

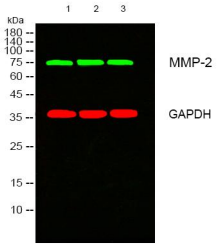
	in the cysteine-switch motif binds the catalytic zinc ion, thus inhibiting the enzyme. The dissociation of the cysteine from the zinc ion upon the activation-peptide release activates the enzyme.,enzyme regulation:Inhibited by histatin-3 1/24 (histatin-5).,Function:In addition to gelatin and collagens, it cleaves KiSS1 at a Gly-|-Leu bond.,PTM:The propeptide is processed by MMP14 (MT-MMP1) and MMP16 (MT-MMP3).,similarity:Belongs to the peptidase M10A family.,similarity:Contains 3 fibronectin type-II domains.,similarity:Contains 4 hemopexin-like domains.,subunit:Ligand for integrin alpha-V/beta-3.,tissue specificity:Produced by normal skin fibroblasts.,
Background	matrix metallopeptidase 2(MMP2) Homo sapiens This gene is a member of the matrix metalloproteinase (MMP) gene family, that are zinc-dependent enzymes capable of cleaving components of the extracellular matrix and molecules involved in signal transduction. The protein encoded by this gene is a gelatinase A, type IV collagenase, that contains three fibronectin type II repeats in its catalytic site that allow binding of denatured type IV and V collagen and elastin. Unlike most MMP family members, activation of this protein can occur on the cell membrane. This enzyme can be activated extracellularly by proteases, or, intracellulary by its S-glutathiolation with no requirement for proteolytical removal of the pro-domain. This protein is thought to be involved in multiple pathways including roles in the nervous system, endometrial menstrual breakdown, regulation of vascularization, and metastasis. Mutations in this gene have been associated with Win
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.



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-MMP2 antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: L6 Lane 2: U-87 MG Lane 3: HT-1080 Predicted band size: 74kDa Observed band size: 64kDa



Rucaparib inhibits lung adenocarcinoma cell proliferation and migration via the SHCBP1/CDK1 pathway. FEBS Journal Rong Zhang WB Human 1 : 1000 A549 cell



Western blot analysis of lysates from 1) 3T3 , 2) Jurkat ,3) HT29 cells, （Green） primary antibody was diluted at 1:1000, 4° over night, secondary antibody