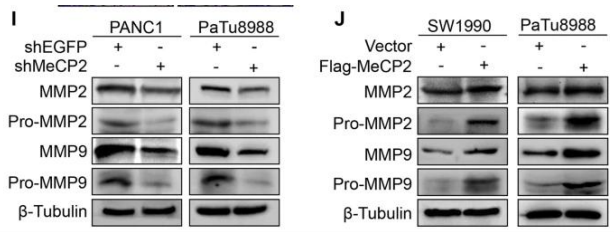
MMP-2 Monoclonal Antibody

Catalog No	YP-mAb-02682
Isotype	IgG
Reactivity	Human;Mouse;Rat;Monkey
Applications	WB
Gene Name	MMP2
Protein Name	72 kDa type IV collagenase
Immunogen	The antiserum was produced against synthesized peptide derived from human MMP-2. AA range:611-660
Specificity	MMP-2 Monoclonal Antibody detects endogenous levels of MMP-2 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	MMP2; CLG4A; 72 kDa type IV collagenase; 72 kDa gelatinase; Gelatinase A; Matrix metalloproteinase-2; MMP-2; TBE-1
Observed Band	74kD
Cell Pathway	[Isoform 1]: Secreted, extracellular space, extracellular matrix . Membrane. Nucleus. Colocalizes with integrin alphaV/beta3 at the membrane surface in angiogenic blood vessels and melanomas. Found in mitochondria, along microfibrils, and in nuclei of cardiomyocytes.; [Isoform 2]: Cytoplasm. Mitochondrion.
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 pres

Background	matrix metallopeptidase 2(MMP2) Homo sapiens This gene is a member of the matrix metalloproteinase (MMP) gene family, that are zinc-dependent enzymes caMABle 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.

Products Images



Western Blot analysis of various cells using MMP-2 Monoclonal Antibody