

# MMP2 monoclonal antibody, clone 2C1

Catalog # MAB2334

Size 100 uL

## Applications



### Western Blot (Recombinant protein)

Western blot analysis of MMP2 using MMP2 monoclonal antibody, clone 2C1 (Cat # MAB2334).

Lane 1 : Human recombinant MMP2 protein.

2 : Schwann cell culture medium.

## Specification

**Product Description** Mouse monoclonal antibody raised against recombinant MMP2.

**Immunogen** Recombinant protein corresponding to human MMP2.

**Host** Mouse

**Reactivity** Human, Mouse, Rat

**Specificity** This antibody is specific to pro and active MMP2.

**Form** Liquid

**Isotype** IgG1, kappa

**Quality Control Testing** Antibody Reactive Against Recombinant Protein.

**Recommend Usage**

- ELISA (1 ug/mL)
- Western Blot (2-5 ug/mL)
- Immunohistochemistry (Frozen sections) (5 ug/mL)
- Immunohistochemistry (5 ug/mL)
- The optimal working dilution should be determined by the end user.

**Storage Buffer** In PBS (0.05% sodium azide)

**Storage Instruction**

Store at -20°C or -80°C.  
Aliquot to avoid repeated freezing and thawing.

**Note**

This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

## Applications

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- Immunohistochemistry (Frozen sections)

- Immunohistochemistry

- Immunoprecipitation

- Enzyme-linked Immunoabsorbent Assay

## Gene Info — MMP2

**Entrez GeneID**[4313](#)**Protein Accession#**[P08253](#)**Gene Name**

MMP2

**Gene Alias**

CLG4, CLG4A, MMP-II, MONA, TBE-1

**Gene Description**

matrix metalloproteinase 2 (gelatinase A, 72kDa gelatinase, 72kDa type IV collagenase)

**Omim ID**[120360](#) [277950](#) [605156](#)**Gene Ontology**[Hyperlink](#)

## Gene Summary

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. This gene encodes an enzyme which degrades type IV collagen, the major structural component of basement membranes. The enzyme plays a role in endometrial menstrual breakdown, regulation of vascularization and the inflammatory response. Mutations in this gene have been associated with Winchester syndrome and Nodulosis-Arthropathy-Osteolysis (NAO) syndrome. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq]

## Other Designations

collagenase type IV-A|matrix metalloproteinase 2|matrix metalloproteinase-III|neutrophil gelatinase

## Publication Reference

- [MMP-2 and MMP-9 increase the neurite-promoting potential of schwann cell basal laminae and are upregulated in degenerated nerve.](#)

Ferguson TA, Muir D.

Molecular and Cellular Neurosciences 2000 Aug; 16(2):157.

- [Neuronal matrix metalloproteinase-2 degrades and inactivates a neurite-inhibiting chondroitin sulfate proteoglycan.](#)

Zuo J, Ferguson TA, Hernandez YJ, Stetler-Stevenson WG, Muir D.

The Journal of Neuroscience 1998 Jul; 18(14):5203.

- [Differences in proliferation and invasion by normal, transformed and NF1 Schwann cell cultures are influenced by matrix metalloproteinase expression.](#)

Muir D.

Clinical & Experimental Metastasis 1995 Jul; 13(4):303.

Application: ELISA, WB-Ce, Rat, D6P2T cells, NF1 cells, Schwann cells

## Pathway

- [Bladder cancer](#)
- [GnRH signaling pathway](#)
- [Leukocyte transendothelial migration](#)
- [Pathways in cancer](#)

## Disease

- [Acute Disease](#)
- [Adenocarcinoma](#)
- [Alzheimer disease](#)
- [Aortic Aneurysm](#)
- [Arthritis](#)
- [Atherosclerosis](#)
- [Atrial Fibrillation](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Bronchopulmonary Dysplasia](#)
- [Carcinoma](#)
- [Cardiac Output](#)
- [Cardiovascular Diseases](#)
- [Carotid Artery Diseases](#)
- [Carotid Stenosis](#)
- [Cervical Intraepithelial Neoplasia](#)
- [Chorioamnionitis](#)
- [Chronic Disease](#)
- [Cleft Lip](#)
- [Cleft Palate](#)
- [Colitis](#)
- [Colorectal Neoplasms](#)
- [Connective Tissue Diseases](#)
- [Constriction](#)

- [Coronary Aneurysm](#)
- [Coronary Artery Disease](#)
- [Coronary Disease](#)
- [Crohn Disease](#)
- [Diabetes Complications](#)
- [Diabetes Mellitus](#)
- [Diabetic Angiopathies](#)
- [Diabetic Retinopathy](#)
- [Disease](#)
- [Disease Progression](#)
- [Disease Susceptibility](#)
- [Edema](#)
- [Endometrial Neoplasms](#)
- [Endometriosis](#)
- [Esophageal Neoplasms](#)
- [Exfoliation Syndrome](#)
- [Fetal Diseases](#)
- [Fetal Growth Retardation](#)
- [Fetal Membranes](#)
- [Fractures](#)
- [Genetic Predisposition to Disease](#)
- [Glaucoma](#)
- [Graft Occlusion](#)
- [Head and Neck Neoplasms](#)
- [Heart Failure](#)
- [Helicobacter Infections](#)

- [Hepatitis C](#)
- [Hypersensitivity](#)
- [Hypertension](#)
- [Hypertrophy](#)
- [Infection](#)
- [Inflammation](#)
- [Intervertebral Disk Displacement](#)
- [Intracranial Aneurysm](#)
- [Kidney Failure](#)
- [Liver Cirrhosis](#)
- [Liver Neoplasms](#)
- [Lung Neoplasms](#)
- [Lymphoma](#)
- [Macular Degeneration](#)
- [Malignant melanoma](#)
- [Melanoma](#)
- [Metabolic Syndrome X](#)
- [Metaplasia](#)
- [Mouth Neoplasms](#)
- [Mucocutaneous Lymph Node Syndrome](#)
- [Multiple Sclerosis](#)
- [Musculoskeletal Diseases](#)
- [Myocardial Infarction](#)
- [Myopia](#)
- [Nasal Polyps](#)
- [Nasopharyngeal Neoplasms](#)

- [Neoplasm](#)
- [Neoplasm Invasiveness](#)
- [Neoplasm Metastasis](#)
- [Neoplasms](#)
- [Neovascularization](#)
- [Obstetric Labor](#)
- [Oral Submucous Fibrosis](#)
- [Osteoarthritis](#)
- [Osteolysis](#)
- [Osteoporosis](#)
- [Ovarian cancer](#)
- [Ovarian Neoplasms](#)
- [Parapsoriasis](#)
- [Periodontitis](#)
- [Pre-Eclampsia](#)
- [Pregnancy Complications](#)
- [Premature Birth](#)
- [Prostate cancer](#)
- [Prostatic Neoplasms](#)
- [Prosthesis-Related Infections](#)
- [Psoriasis](#)
- [Pulmonary Disease](#)
- [Pulmonary Fibrosis](#)
- [Recurrence](#)
- [Rhinitis](#)
- [Scleroderma](#)

- [Sinusitis](#)
- [Skin Diseases](#)
- [Skin Neoplasms](#)
- [Spinal Diseases](#)
- [Stomach Neoplasms](#)
- [Stroke](#)
- [Subarachnoid Hemorrhage](#)
- [Urinary Bladder Neoplasms](#)
- [Uterine Cervical Neoplasms](#)
- [Uterine Diseases](#)