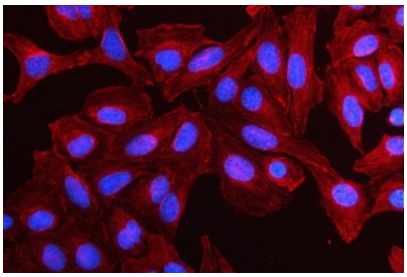
MMP19 Antibody / Tissue Remodeling Protein Antibody (RQ8318)

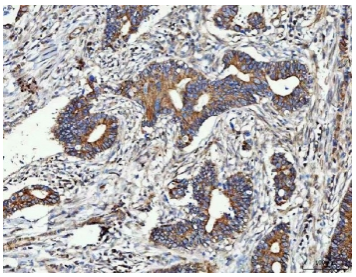
Catalog No.	Formulation	Size
RQ8318	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

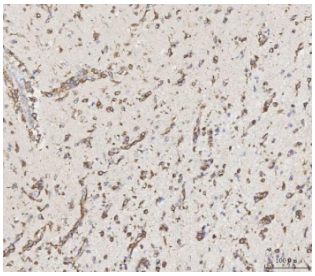
Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q99542
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml Immunofluorescence : 5ug/ml Flow Cytometry : 1-3ug/million cells ELISA : 0.1-0.5ug/ml
Limitations	This MMP19 Antibody / Tissue Remodeling Protein Antibody is available for research use only.



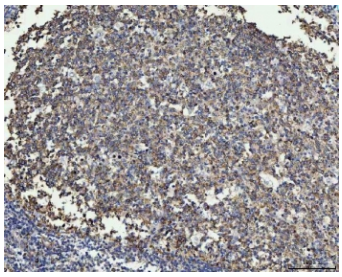
MMP19 Antibody U-2 OS Cell IF. Immunofluorescent staining of FFPE human U-2 OS cells using MMP19 antibody demonstrates prominent cytoplasmic staining (red) throughout the cell body, consistent with expression of Matrix Metalloproteinase 19 (MMP19). MMP19 is a tissue remodeling protein that regulates extracellular matrix turnover, cellular migration, and tissue organization through modification of the extracellular microenvironment. The observed staining pattern is consistent with the synthesis and intracellular trafficking of MMP19 prior to secretion and extracellular activity. DAPI nuclear stain (blue) identifies cell nuclei and provides contrast to the predominantly cytoplasmic distribution of MMP19. HIER: steam section in pH6 citrate buffer for 20 min.



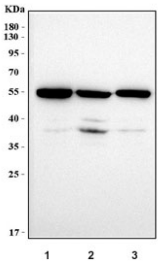
MMP19 Antibody Human Colorectal Adenocarcinoma IHC. Immunohistochemistry staining of FFPE human colorectal adenocarcinoma tissue using MMP19 antibody demonstrates strong cytoplasmic and membranous staining within malignant gland-forming epithelial cells, consistent with expression of Matrix Metalloproteinase 19 (MMP19). MMP19 is a tissue remodeling protein that regulates extracellular matrix turnover, cellular migration, and interactions between tumor cells and the surrounding microenvironment. The observed staining pattern is consistent with the established role of matrix metalloproteinases in extracellular matrix remodeling and tissue reorganization. These findings support the utility of MMP19 antibody for studies of tissue remodeling, extracellular matrix regulation, and tumor-associated cellular behavior. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



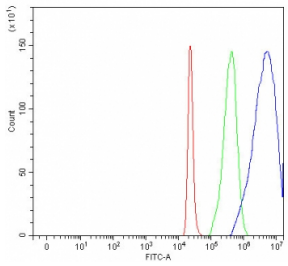
MMP19 Antibody Human Glioma IHC. Immunohistochemistry staining of FFPE human glioma tissue using MMP19 antibody demonstrates widespread cytoplasmic staining within neoplastic cells distributed throughout the tumor parenchyma, consistent with expression of Matrix Metalloproteinase 19 (MMP19). MMP19 is a tissue remodeling protein that regulates extracellular matrix turnover, cellular migration, and interactions between cells and the surrounding microenvironment. The observed staining pattern is consistent with the established role of matrix metalloproteinases in tissue reorganization and extracellular matrix regulation within complex cellular environments. These findings support the utility of MMP19 antibody for studies of tissue remodeling, extracellular matrix dynamics, and tumor-associated cellular behavior. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



MMP19 Antibody Human Tonsil IHC. Immunohistochemistry staining of FFPE human tonsil using MMP19 antibody demonstrates widespread cytoplasmic staining throughout lymphoid cell populations, with particularly prominent immunoreactivity within germinal center-associated regions. Matrix Metalloproteinase 19 (MMP19) is a tissue remodeling protein that regulates extracellular matrix turnover, cellular migration, and interactions between immune cells and their surrounding microenvironment. The observed staining pattern is consistent with the established role of matrix metalloproteinases in tissue organization, extracellular matrix regulation, and dynamic remodeling processes within lymphoid tissues. These findings support the utility of MMP19 antibody for studies of tissue remodeling, extracellular matrix biology, and immune-associated cellular behavior. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



MMP19 Antibody Human Cell Line WB. Western blot analysis of human SH-SY5Y, 293T, and HeLa cell lysates using MMP19 antibody demonstrates a prominent immunoreactive band at approximately 57 kDa, consistent with the expected molecular weight of Matrix Metalloproteinase 19 (MMP19). MMP19 is a tissue remodeling protein that regulates extracellular matrix turnover, cellular migration, and interactions between cells and their surrounding microenvironment. The observed expression across multiple human cell lines supports the utility of this antibody for investigating extracellular matrix regulation, tissue organization, and remodeling-associated signaling pathways. Predicted molecular weight: ~57 kDa.



MMP19 Antibody 293T Flow Cytometry. Flow cytometric analysis of fixed and permeabilized human 293T cells using MMP19 antibody demonstrates a pronounced rightward shift of the blue histogram (MMP19 antibody) relative to the green histogram (isotype control) and red histogram (cells alone), consistent with expression of Matrix Metalloproteinase 19 (MMP19). MMP19 is a tissue remodeling protein that regulates extracellular matrix turnover, cellular migration, and interactions between cells and their surrounding microenvironment. The observed staining pattern supports detection of endogenous MMP19 expression and demonstrates the utility of this antibody for studies of extracellular matrix regulation, tissue remodeling, and remodeling-associated cellular signaling pathways. Cells were fixed, permeabilized, and stained with 1 ug antibody per million cells following blocking with goat sera.

Description

MMP19 Antibody / Tissue Remodeling Protein Antibody is designed for the detection and study of MMP19 (Matrix Metalloproteinase 19), a zinc-dependent extracellular protease that participates in remodeling of the extracellular matrix and regulation of tissue architecture. MMP19 belongs to the matrix metalloproteinase family, a group of enzymes responsible for controlled degradation and modification of extracellular matrix components. Through these activities, MMP19 helps coordinate tissue remodeling, cellular migration, and maintenance of normal tissue structure throughout development and adult physiology.

As a tissue remodeling protein, MMP19 functions within the extracellular environment where it regulates interactions between cells and surrounding matrix components. Controlled remodeling of extracellular matrix networks is essential for tissue morphogenesis, cellular differentiation, wound repair, and adaptation to changing physiologic conditions. By modifying structural matrix proteins and influencing the local cellular microenvironment, MMP19 contributes to dynamic biologic processes that require coordinated tissue reorganization and cellular movement.

MMP19 is expressed in a variety of tissues and has been implicated in pathways involving epithelial biology, immune responses, tissue repair, and developmental remodeling. Unlike many matrix metalloproteinases that are associated primarily with matrix degradation, MMP19 participates in broader regulatory functions that influence extracellular signaling environments and cellular behavior. These activities have established MMP19 as an important mediator of tissue homeostasis and extracellular matrix turnover.

The ability of MMP19 to regulate extracellular matrix composition has generated significant interest in studies of wound healing, inflammation, cancer progression, and tissue regeneration. Remodeling of extracellular matrix networks can influence cellular adhesion, migration, proliferation, and communication, making MMP19 an important target for investigations of both normal physiology and disease-associated tissue changes. Researchers continue to examine how MMP19 contributes to maintenance of tissue integrity and how alterations in its activity may affect cellular responses within complex tissue environments.

As a tissue remodeling protein, MMP19 occupies a key position at the interface between extracellular matrix regulation and cellular behavior. Its capacity to modify the structural and signaling properties of the extracellular environment allows MMP19 to influence numerous biologic processes involved in tissue organization and adaptation. These functions have made MMP19 a valuable research target for understanding mechanisms that govern tissue development, maintenance, and repair.

MMP19 Antibody is useful for investigating tissue remodeling, extracellular matrix regulation, cellular migration, and developmental biology pathways. Researchers utilize MMP19 Antibody reagents to evaluate protein expression patterns and study molecular mechanisms governing extracellular matrix turnover, tissue organization, wound repair, and maintenance of normal tissue architecture.

Application Notes

Optimal dilution of the MMP19 Antibody / Tissue Remodeling Protein Antibody should be determined by the researcher.

Immunogen

An E.coli-derived human recombinant protein (L120-D437) was used as the immunogen for the MMP19 antibody.

Storage

After reconstitution, the MMP19 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

MMP19 Antibody, Matrix Metalloproteinase 19 Antibody, Tissue Remodeling Protein Antibody, Extracellular Matrix Remodeling Enzyme Antibody, Matrix Remodeling Enzyme Antibody, Metalloprotease Antibody, Cell Migration Protein Antibody