

**Anti-TIMP4 (MOUSE) Monoclonal Antibody**  
**TIMP4 Antibody**  
**Catalog # ASR4215**

**Specification**

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**Anti-TIMP4 (MOUSE) Monoclonal Antibody - Product Information**

Host	<b>Mouse</b>
Conjugate	<b>Unconjugated</b>
Target Species	<b>Human</b>
Reactivity	<b>Human</b>
Clonality	<b>Monoclonal</b>
Application	<b>WB, IHC, E, I, LCI</b>
Application Note	<b>Anti-TIMP4 antibody has been tested for use in ELISA, Native - Western, and IHC (P). SDS-PAGE - Western Blot not useful for endogenous detection. Specific conditions for reactivity should be optimized by the end user.</b>
Physical State	<b>Liquid (sterile filtered)</b>
Buffer	<b>0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2</b>
Immunogen	<b>Anti-TIMP4 (MOUSE) Monoclonal Antibody was produced in mouse by repeated immunizations with full length human TIMP4 protein followed by hybridoma development.</b>
Preservative	<b>0.01% (w/v) Sodium Azide</b>

**Anti-TIMP4 (MOUSE) Monoclonal Antibody - Additional Information**

**Gene ID** 7079

**Other Names**  
7079

**Purity**

Anti-TIMP4 was purified from clarified mouse ascetic fluid by Protein A chromatography followed by extensive dialysis against the buffer stated above. TIMP4 antibody is specific for human TIMP4 protein. This antibody reacts with human TIMP4 in tissue sections of formalin-fixed, paraffin-embedded In ELISAs and Native-PAGE, this antibody does not cross-react with recombinant human TIMP-1, -2 or -3. A BLAST analysis was used to suggest cross-reactivity with TIMP4 from human and mouse sources based on the immunizing sequence. Cross-reactivity with TIMP-4 from other sources has not been determined.

**Storage Condition**

Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

### Precautions Note

This product is for research use only and is not intended for therapeutic or diagnostic applications.

## Anti-TIMP4 (MOUSE) Monoclonal Antibody - Protein Information

**Name** TIMP4

### Function

Complexes with metalloproteinases (such as collagenases) and irreversibly inactivates them by binding to their catalytic zinc cofactor. Known to act on MMP-1, MMP-2, MMP-3, MMP-7 and MMP-9.

### Cellular Location

Secreted.

### Tissue Location

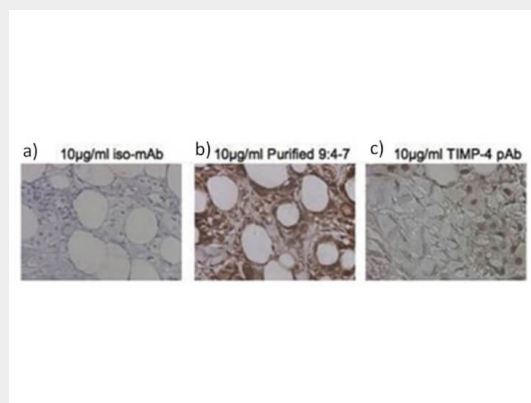
Abundant in heart and present at low levels in many other tissues

## Anti-TIMP4 (MOUSE) Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## Anti-TIMP4 (MOUSE) Monoclonal Antibody - Images



Immunohistochemistry of Mouse Anti-TIMP4 Antibody. Tissue: human breast carcinoma. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: a) isotype specific IgG2bk monoclonal; b) monoclonal TIMP-4 antibody (clone 9:4-7); and c) polyclonal TIMP-4, each at 10 µg/mL. Secondary antibody: Peroxidase secondary antibody at 1:10,000 for 45 min at RT. Localization: TIMP-4 is secreted. Staining: TIMP-4 as precipitated brown signal.

## Anti-TIMP4 (MOUSE) Monoclonal Antibody - Background

Tissue inhibitor of metalloproteinase-4 (TIMP-4) is member of the TIMP family of inhibitors of matrix metalloproteinase (MMP) activities. In addition, TIMPs have non-MMP associated functions, including roles in growth promotion, apoptosis, and angiogenesis. All four members of the TIMP gene family form a similar secondary structure due to the formation of six highly conserved disulfide bonds. It has been reported that some TIMPs, TIMP4 included, can bind a tetraspanin in the plasma membrane, initiating an intra-cellular signaling cascade. Elevated levels of TIMP4 have been associated with breast cancer progression and heart disease.