

**Datasheet for 200-301-E65S****TIMP4 Antibody****Overview**

|                      |                                                       |
|----------------------|-------------------------------------------------------|
| <b>Description:</b>  | Anti-TIMP4 (MOUSE) Monoclonal Antibody - 200-301-E65S |
| <b>Item No.:</b>     | 200-301-E65S                                          |
| <b>Size:</b>         | 25 µL                                                 |
| <b>Applications:</b> | ELISA, IHC                                            |
| <b>Reactivity:</b>   | Human                                                 |
| <b>Host Species:</b> | Mouse                                                 |

**Product Details**

|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Background:</b>   | 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. |
| <b>Synonyms:</b>     | mouse anti-TIMP4 antibody, Tissue inhibitor of metalloproteinase-4, Metalloproteinase inhibitor 4, TIMP-4, TIMP 4, TIMP4 antibody, anti-TIMP-4 antibody                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Host Species:</b> | Mouse                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Clonality:</b>    | Monoclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Clone ID:</b>     | 9:4-7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Format:</b>       | IgG2b                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

**Target Details**

|                        |                     |
|------------------------|---------------------|
| <b>Gene Name:</b>      | TIMP4               |
| <b>Reactivity:</b>     | Human               |
| <b>Immunogen Type:</b> | Recombinant Protein |

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <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>Purity/Specificity:</b> | 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. |
| <b>Relevant Links:</b>     | <ul style="list-style-type: none"><li>• <a href="#">UniProtKB - Q99727</a></li><li>• <a href="#">NCBI - NM_003256.3</a></li><li>• <a href="#">GenelD - 7079</a></li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                |

## Application Details

|                             |                                                                                                                                                                                                                           |
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| <b>Tested Applications:</b> | ELISA, IHC                                                                                                                                                                                                                |
| <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>Assay Dilutions:</b>     | All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.                                                                                                                           |
| <b>ELISA:</b>               | 1:20,000 - 1:100,000                                                                                                                                                                                                      |
| <b>IHC:</b>                 | 5-10µg/mL                                                                                                                                                                                                                 |
| <b>WB:</b>                  | 1:2,000 to 1:10,000                                                                                                                                                                                                       |

## Formulation

|                        |                                                            |
|------------------------|------------------------------------------------------------|
| <b>Physical State:</b> | Liquid (sterile filtered)                                  |
| <b>Concentration:</b>  | 1.0 mg/mL by UV absorbance at 280 nm                       |
| <b>Buffer:</b>         | 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 |
| <b>Preservative:</b>   | 0.01% (w/v) Sodium Azide                                   |

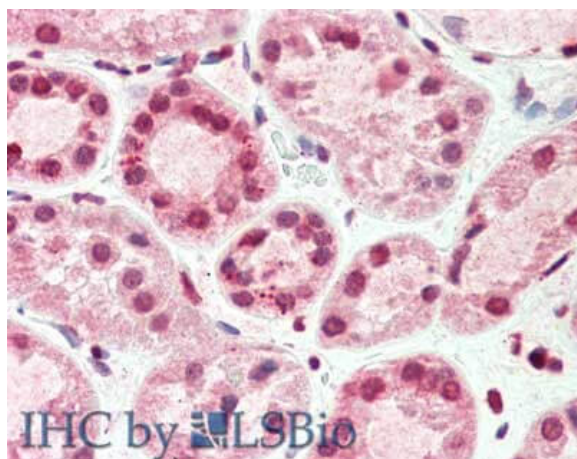
## Shipping & Handling

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|----------------------------|---------|
| <b>Shipping Condition:</b> | Dry Ice |
|----------------------------|---------|

**Storage Condition:** Store vial at -20° C or below prior to opening. This vial contains a relatively low volume of reagent (25 µL). To minimize loss of volume dilute 1:10 by adding 225 µL of the buffer stated above directly to the vial. Recap, mix thoroughly and briefly centrifuge to collect the volume at the bottom of the vial. Use this intermediate dilution when calculating final dilutions as recommended below. Store the vial at -20°C or below after dilution. Avoid cycles of freezing and thawing.

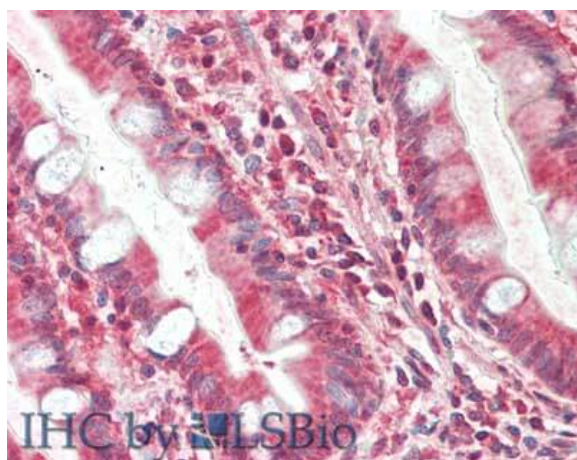
**Expiration:** Expiration date is one (1) year from date of receipt.

## Images



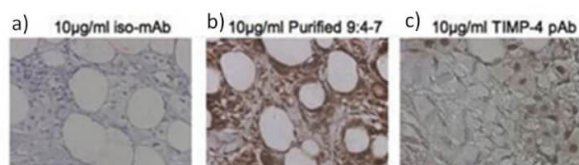
### Immunohistochemistry

Immunohistochemistry of Mouse anti-TIMP4 antibody.  
Tissue: human kidney. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: anti-TIMP4 antibody at 10 µg/mL for 1 h at RT. Secondary antibody: Peroxidase mouse secondary antibody at 1:10,000 for 45 min at RT. Staining: TIMP4 as precipitated red signal with hematoxylin purple nuclear counterstain.



### Immunohistochemistry

Immunohistochemistry of Mouse anti-TIMP4 antibody.  
Tissue: human small intestine. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: anti-TIMP4 antibody at 10 µg/mL for 1 h at RT. Secondary antibody: Peroxidase mouse secondary antibody at 1:10,000 for 45 min at RT. Staining: TIMP4 as precipitated red signal with hematoxylin purple nuclear counterstain.



### Immunohistochemistry

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.

## Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.