

**Mouse Anti-TIMP1 Recombinant [TIMP1/4356]: MC0324, MC0324RTU7**

**Intended Use:** For Research Use Only

**Description:** TIMP-1, TIMP-2, TIMP-3 and TIMP-4 (for tissue inhibitor of metalloproteinases -1, -2, -3 and -4) complex with metalloproteinases such as collagenases, gelatinases and stromelysins, resulting in irreversible inactivation of the metalloproteinase. TIMP-1 is identical to EPA (erythroid-potential activity). PTH has been shown to be a regulator of TIMP-2 in osteoblastic cells. TIMP-3 may be involved in regulating trophoblastic invasion of the uterus as well as in regulating remodeling of the extracellular matrix during the folding of epithelia, and in the formation, branching and expansion of epithelial tubes. TIMP-4 is most highly expressed in heart tissues. Studies have demonstrated that TIMP1 is useful as a biomarker for early detection of colorectal cancer, outperforming CEA. Additionally, TIMP1 studies have demonstrated its role in CRC tumorigenesis, as well as observing its overexpression in metastatic lymph nodes.

**Specifications**

Clone: TIMP1/4356  
 Source: Mouse  
 Isotype: IgG1k  
 Reactivity: Human  
 Localization: Cytoplasm  
 Formulation: Antibody in PBS pH7.4, containing BSA and  $\leq 0.09\%$  sodium azide (NaN<sub>3</sub>)  
 Storage: Store at 2°- 8°C  
 Applications: IHC  
 Package:

Description	Catalog No.	Size
TIMP1 Recombinant Concentrated	MC0324	1 ml
TIMP1 Recombinant Prediluted	MC0324RTU7	7 ml

**IHC Procedure**

Positive Control Tissue: Colon carcinoma, 293 cell extract, or rat brain lysate  
 Concentrated Dilution: 50-200  
 Pretreatment: EDTA pH9  
 .0, 15 minutes using Pressure Cooker, or 30-60 minutes  
 using water bath at 95°-99°C  
 Incubation Time and Temp: 30-60 minutes @ RT  
 Detection: Refer to the detection system manual

\* Result should be confirmed by an established diagnostic procedure.

**References:**

1. Comparative studies of TIMP-1 immunohistochemistry, TIMP-1 FISH analysis and plasma TIMP-1 in glioblastoma patients. Aaberg-Jessen C et al. J Neurooncol. 2016.
2. Loss of TIMP-1 immune expression and tumor recurrence in localized prostate cancer. Reis ST et al. Int Braz J Urol. 2015.
3. Molecular characterization and hormonal regulation of tissue inhibitor of metalloproteinase 1 in goat ovarian granulosa cells. Peng JY et al. Domest Anim Endocrinol. 2015.
4. Timp-1 Is Important for Epithelial Proliferation and Branching Morphogenesis during Mouse Mammary Development
5. Jimmie E. Fata, et al. Developmental Biology 211, 238–254, 1999.

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