A Reliable Research Partner in Life Science and Medicine

## Recombinant Human TIMP-1 protein (His Tag)

Catalog Number: PDMH100115

Note: Centrifuge before opening to ensure complete recovery of vial contents.

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Species Human

Source HEK293 Cells-derived Human TIMP-1 protein Met1-Ala207, with an C-terminal His

Calculated MW22.7 kDaObserved MW30 kDaAccessionP01033

**Bio-activity** Not validated for activity

## **Properties**

**Purity** > 95% as determined by reducing SDS-PAGE.

**Endotoxin** < 1.0 EU/mg of the protein as determined by the LAL method

Storage Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80

°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of

reconstituted samples are stable at < -20°C for 3 months.

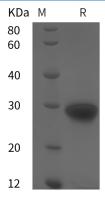
ShippingThis product is provided as lyophilized powder which is shipped with ice packs.FormulationLyophilized from a 0.2 μm filtered solution in PBS with 5% Trehalose and 5%

Mannitol.

**Reconstitution** It is recommended that sterile water be added to the vial to prepare a stock solution of

0.5 mg/mL. Concentration is measured by UV-Vis.

## Data



> 95 % as determined by reducing SDS-PAGE.

## Background

Tissue Inhibitor of Metalloproteinases 1 (TIMP-1) is a member of TIMP family. The homologous proteins of TIMPs regulate the activity of matrix metalloproteinases (MMPs), including inhibition of active MMPs, proMMP activation, cell growth promotion, matrix binding, inhibition of angiogenesis and the induction of apoptosis. Timp-1 complexes with metalloproteinases (such as collagenases) and irreversibly inactivates them by binding to their catalytic zinc cofactor. It also mediates erythropoiesis in vitro, but, unlike IL-3, it is species-specific, stimulating the growth and differentiation of only human and murine erythroid progenitors. It is known to act on MMP-1, MMP-2, MMP-3, MMP-7, MMP-8, MMP-9, MMP-10, MMP-11, MMP-12, MMP-13, and MMP-16, without MMP-14.