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

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

Catalog Number: PDMH100115



Description **Species** Human Mol Mass 22.7 kDa Accession P01033 Not validated for activity **Bio-activity Properties** > 95% as determined by reducing SDS-PAGE. Purity Endotoxin < 1.0 EU/mg of the protein as determined by the LAL method Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 Storage °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at  $< -20^{\circ}$ C for 3 months. This product is provided as lyophilized powder which is shipped with ice packs. Shipping Formulation Lyophilized 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

KDa 80	М	R
60		
40		
30		-
50		
20		
12		

> 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.

## For Research Use Only