

## **Synonym**

CSC-21K,TIMP2

#### Source

Human TIMP-2, His Tag(TI2-H5223) is expressed from human 293 cells (HEK293). It contains AA Cys 27 - Pro 220 (Accession # NP\_003246.1). Predicted N-terminus: Cys 27

## **Molecular Characterization**

TIMP-2(Cys 27 - Pro 220) NP\_003246.1

Poly-his

This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 22.6 kDa. The protein migrates as 23-26 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

#### **Endotoxin**

Less than 1.0 EU per µg by the LAL method.

## **Purity**

>95% as determined by SDS-PAGE.

#### **Formulation**

Lyophilized from 0.22  $\mu m$  filtered solution in 50 mM Tris, 150 mM NaCl, pH7.5 with trehalose as protectant.

Contact us for customized product form or formulation.

#### Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

### Storage

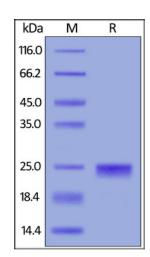
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

## **SDS-PAGE**



Human TIMP-2, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

## Background

TIMP metallopeptidase inhibitor 2 is also known as TIMP2, which belongs to the protease inhibitor I35 (TIMP) family. This family protein are natural inhibitors of the matrix metalloproteinases, a group of peptidases involved in degradation of the extracellular matrix. The TIMP family encompasses four members (TIMP1, TIMP2, TIMP3, TIMP4), and they inhibit most MMPs by forming non-covalent binary complex. In addition to an inhibitory role against metalloproteinases, TIMP2 has a unique role among TIMP family members in its ability to directly suppress the proliferation of endothelial cells. As a result, TIMP-2 may be critical to the



# **Human TIMP-2 Protein, His Tag**

Catalog # TI2-H5223



maintenance of tissue homeostasis by suppressing the proliferation of quiescent tissues in response to angiogenic factors, and by inhibiting protease activity in tissues undergoing remodelling of the extracellular matrix.

**Clinical and Translational Updates** 

