Human TIMP-2 Protein, His Tag

Catalog # TI2-H5223

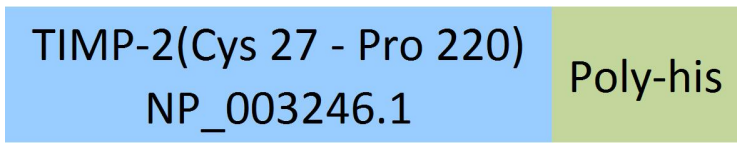
Synonym

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



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 / rFC method.

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 μm 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

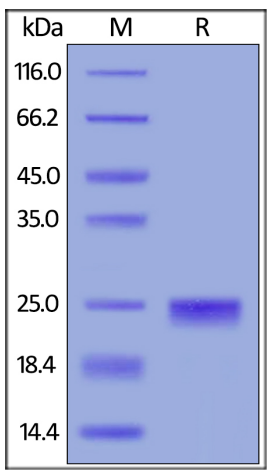
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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

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.