

Synonym

TIMP1,CLGI,TIMP

Source

Human TIMP1, His Tag (TI1-H5226) is expressed from human 293 cells (HEK293). It contains AA Cys 24 - Ala 207 (Accession # P01033-1).

Predicted N-terminus: Cys 24

Molecular Characterization

TIMP-1(Cys 24 - Ala 207) P01033-1	Poly-his
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This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 21.5 kDa. The protein migrates as 30-34 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 μm filtered solution in PBS, pH7.4. Normally trehalose is added as protectant before lyophilization.

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.

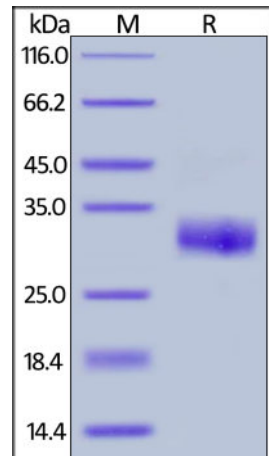
Storage

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 TIMP1, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

Background

TIMP metalloproteinase inhibitor 1 is also known as TIMP1, a tissue inhibitor of metalloproteinases, is a glycoprotein that is expressed from the several tissues of organisms. This protein a member of the TIMP family. There are four members of the family, TIMP1, TIMP2, TIMP3 and TIMP4. TIMP1 is a glycoprotein with a molecular mass of 28 kDa produced by a wide range of cell types. The glycoprotein is a natural inhibitor of the matrix metalloproteinases (MMPs), a group of peptidases involved in degradation of the extracellular matrix. In addition to its inhibitory role against most of the known MMPs, the encoded protein is able to promote cell proliferation in a wide range of cell types, and may also have an anti-apoptotic function. Transcription of this gene is highly inducible in response to

many cytokines and hormones. In addition, the expression from some but not all inactive X chromosomes suggests that this gene inactivation is polymorphic in human females. This gene is located within intron 6 of the synapsin I gene and is transcribed in the opposite direction.

References

(1) [Hornebeck W., 2004, Pathol. Biol. 51 \(10\): 569–73.](#)

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.