Mouse TIMP-1 Protein, His Tag (active enzyme, MALS verified)

Catalog # TI1-M52H6

Synonym

TIMP1,CLGI,TIMP

Source

Mouse TIMP-1 Protein, His Tag(TI1-M52H6) is expressed from human 293 cells (HEK293). It contains AA Cys 25 - Arg 205 (Accession # P12032-1). Predicted N-terminus: Cys 25

Molecular Characterization

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

The protein has a calculated MW of 22.1 kDa. The protein migrates as 30-33 kDa when calibrated against Star Ribbon Pre-stained Protein Marker 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.

>90% as determined by SEC-MALS.

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

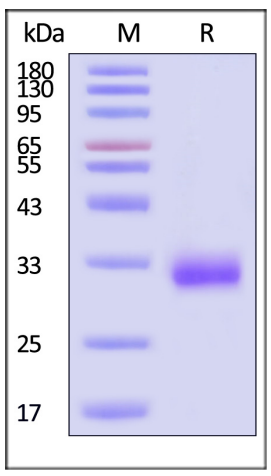
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

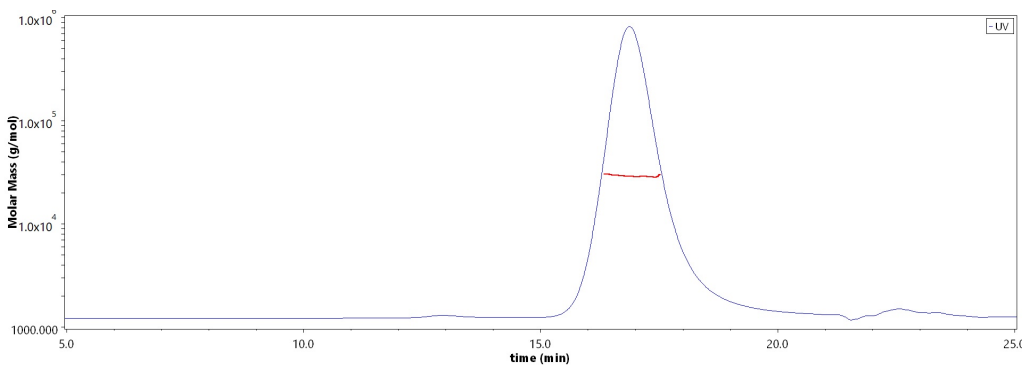
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Mouse TIMP-1 Protein, 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% (With Star Ribbon Pre-stained Protein Marker).

SEC-MALS



The purity of Mouse TIMP-1 Protein, His Tag (Cat. No. TI1-M52H6) is more than 90% and the molecular weight of this protein is around 24-36 kDa verified by SEC-MALS.
Report

Bioactivity

Measured by its ability to inhibit human MMP2 cleavage of a fluorogenic peptide substrate Mca-PLGL-Dpa-AR-NH2. The IC50 value is <3 nM (QC tested).

Background

Predicted to enable several functions, including cytokine activity; metalloendopeptidase inhibitor activity; and zinc ion binding activity. Acts upstream of or within connective tissue replacement involved in inflammatory response wound healing. Located in basement membrane. Is expressed in several structures, including early conceptus; hindlimb cartilage condensation; jaw; reproductive system; and skeletal system. Orthologous to human TIMP1 (TIMP metallopeptidase inhibitor 1).