

Recombinant Mouse TIMP-2/TIMP2 protein (His tag)

Catalog No. PDEM100090

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

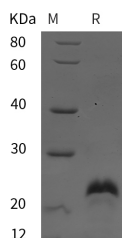
Description

Synonyms	CSC-21Ktissue inhibitor of metalloproteinase 2;metalloproteinase inhibitor 2;TIMP metalloproteinase inhibitor 2;Tissue inhibitor of metalloproteinase 2.
Species	Mouse
Expression Host	E.coli
Sequence	Cys 27-Pro 220
Accession	P25785
Calculated Molecular Weight	21.2 kDa
Observed molecular weight	25 kDa
Tag	N-His
Bioactivity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	Please contact us for more information.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
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



> 95 % as determined by reducing SDS-PAGE.

Background

For Research Use Only

Mouse Metalloproteinase inhibitor 2 (TIMP-2), belongs to a family of proteins that regulate the activation and proteolytic activity of matrix metalloproteinases (MMPs). There are four mammalian members of the family; TIMP-1, TIMP-2, TIMP-3, and TIMP-4. The TIMP-2 is detected in testis, retina, hippocampus and cerebral cortex. The function of TIMP 2 protein is to inhibit MMPs non covalently by the formation of binary complexes. Complexes with metalloproteinases (such as collagenases) and irreversibly inactivates them by binding to their catalytic zinc cofactor. And the interaction with MMP-14 facilitates the activation of pro-MMP-2. It has been shown that the binding of TIMP 2 to $\alpha 3 \beta 1$ integrin results in the inhibition of endothelial cell proliferation and angiogenesis.