

32-2853: TIMP2 HEK Recombinant Protein

Alternative Name : TIMP metalloproteinase inhibitor 2,CSC-21K,tissue inhibitor of metalloproteinase 2,TIMP-2,metalloproteinase inhibitor 2.

Description

Source : HEK293 Cells. TIMP2 Human Recombinant produced in HEK-293 cells is a secreted protein with the sequence of Human TIMP-2 (amino acids Cys27-Pro220) and is fused to a polyhistidine tag at the C-terminus. TIMP2 belongs to the TIMP gene family. The proteins encoded by this gene family are natural inhibitors of the matrix metalloproteinases, a group of peptidases that take part in degradation of the extracellular matrix. Besides having an inhibitory role against metalloproteinases, the encoded protein has a exclusive part among TIMP family members in its capability to directly suppress the proliferation of endothelial cells. Consequently, the encoded protein is crucial to the conservation of tissue homeostasis by suppressing the production of quiescent tissues as an answer to angiogenic factors, and by inhibiting protease activity in tissues undergoing renovation of the extracellular matrix.

Product Info

Amount : 10 µg
Purification : Greater than 95.0% as determined by SDS-PAGE.
Content : The TIMP2 protein was lyophilized after extensive dialysis against PBS.
Storage condition : Lyophilized TIMP2 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution TIMP2 should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

Application Note

It is recommended to reconstitute the lyophilized TIMP2 in sterile assay buffer (50mM Tris, 10mM CaCl₂, 150mM NaCl, 0.05% Brij-35, PH 7.5) not less than 100 µg/ml. The IC₅₀ of 3 nM is measured by its ability to inhibit recombinant human MMP-2 cleavage of the colorimetric peptide substrate, Mca-PLGL-DpaAR-NH₂.