

PRODUCT DATA SHEET



TIMP-1 (human, purified)

CATALOG NO.: SE-530

LOT NO.: XXXXX

DESCRIPTION: MW approximately 28 kDa (glycosylated) by SDS-PAGE. Tissue inhibitor of metalloproteinases-1 (TIMP-1) purified from human neutrophils. Free of MMPs or other TIMPs.

PURITY: >92% by SDS-PAGE.

USAGE: MMP or ADAM inhibitor *in vitro*¹ or in tissue culture²; positive control in antibody applications or reverse zymograms. TIMP-1 inhibits most MMPs, displaying k_i s in the low nanomolar range, although it is not very effective against the MT-MMPs³⁻⁵. It also can inhibit ADAMs such as ADAM10⁶ and ADAMTS4⁷. While it can inhibit angiogenesis, it can also promote cell growth^{8,9}.

SUPPLIED AS: 5 µg at 0.05 µg/µl in 50 mM Tris-HCl pH7, 0.2M NaCl, 5 mM CaCl₂, 1µM ZnCl₂, 0.05% Brij-35, 0.05% NaAzide.

STORAGE: -80°C. After initial defrost, aliquot product into individual tubes and refreeze at -80°C. Avoid repeated freeze/defrost cycles.

NOTE: When stored under the above conditions, this protein is stable at the concentration supplied, in its current storage buffer. Procedures such as dilution of the enzyme followed by refreezing, could lead to loss of activity.

REFERENCES:

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3. G. Murphy and F. Willenbrock *Methods Enzymol.* 1995 **248** 496
4. H. Nagase and K. Brew *Arthritis Res.* 2002 **4(suppl 3)** S51
5. E. Lambert *et al.* *Crit. Rev. Oncol. Hematol.* 2004 **49** 187
6. A. Amour *et al.* *FEBS Lett.* 2000 **473** 275
7. G. Hashimoto *et al.* *FEBS Lett.* 2001 **494** 192
8. M. Bloomston *et al.* *J. Surg. Res.* 2002 **102** 39
9. R. Visse and H. Nagase *Circ. Res.* 2003 **92** 827

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