

# Recombinant Human Tissue Inhibitor of Metalloproteinase 1 (TIMP-1)

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Rev. 1.00

<b>Catalog Number:</b>	PHC8024	PHC8025	PHC8021	PHC8023
<b>Quantity:</b>	10 µg	25 µg	100 µg	1 mg
<b>Lot Number:</b>	See product label.			
<b>Molecular Weight:</b>	20.7 kDa (migrates as a 28 kDa protein on SDS-PAGE due to glycosylation).			
<b>Purity:</b>	>95% as determined by SDS-PAGE analysis.			
<b>Amino Acid Sequence:</b>	CTCVPPHPQT AFCNSDLVIR AKFVGTPEVN QTTLYQRYEI KMTKMYKGFQ ALGDAADIRF VYTPAMESVC GYFHRSHNRS EEFLIAGKLQ DGLLHITTCF VVAPWNSLSL AQRRTGFTKTY TVGCEECTVF PCLSIPCKLQ SGTHTLWTDQ LLQGSEKGFQ SRHLACLPRE PGLCTWQSLR SQIA			
<b>Biological Activity:</b>	IC <sub>50</sub> = 0.4–1.2 nM, determined by the concentration dependent inhibition of human MMP-2 hydrolysis of a peptide substrate (7-methoxycoumarin-4-yl)acetyl-Pro-Leu-Gly-Leu-(3-[2, 4-dinitrophenyl]-L-2, 3-diaminopropionyl)-Ala-Arg-NH <sub>2</sub> , under conditions in which 2.8 nM recombinant pro-MMP-2 is activated, and the peptide substrate concentration is 5 µM.			
<b>Formulation:</b>	Lyophilized, carrier free.			
<b>Sterility:</b>	Filtered prior to lyophilization through a 0.22 micron sterile filter.			
<b>Endotoxin:</b>	<0.1 ng/µg			
<b>Production:</b>	Recombinant human TIMP-1 is expressed in Embryonic Human Kidney 293-F cells and purified via sequential chromatography.			
<b>Reconstitution Recommendation:</b>	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute lyophilized recombinant human TIMP-1 in sterile, distilled water to a concentration of 0.1–0.5 mg/mL. Further dilutions should be made in low endotoxin medium or a buffered solution containing a carrier protein such as heat inactivated FCS or tissue culture grade BSA.			
<b>Suggested Working Dilutions:</b>	The optimal concentration should be determined for each specific application.			
<b>Storage:</b>	Store lyophilized human TIMP-1 at 2°C to 8°C, preferably desiccated. Upon reconstitution, apportion into working aliquots and store at ≤ -20°C. Avoid repeated freeze/thaw cycles.			
<b>Expiration Date:</b>	Expires one year from date of receipt when stored as instructed.			
<b>References:</b>	Gomis-Ruth, F., K. Maskos, M. Betz, A. Bergner, R. Huber, K. Suzuki, N. Yoshida, H. Nagase, B. Keith, G.P. Bourenkov, H. Nagase, K. Brew, G.P. Bourenkov, H. Bartunik, and W. Bode. (1997) Mechanism of inhibition of the human matrix metalloproteinase stromelysin-1 by TIMP-1. <i>Nature</i> . 389(6646):77–81.			

## Explanation of Symbols

The symbols present on the product label are explained below:

Symbol	Description
	Catalog Number
	Research Use Only
	Use by
	Manufacturer
	Without, does not contain
	Protect from light
	Directs the user to consult instructions for use (IFU), accompanying the product.

Symbol	Description
	Batch code
	In vitro diagnostic medical device
	Temperature limitation
	European Community authorized representative
	With, contains
	Consult accompanying documents

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**For Research Use Only. Caution: Not for human or animal therapeutic or diagnostic use.**

Manufactured under ISO 13485 Quality Standard

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