

**Recombinant Human Tissue Inhibitor of
Metalloproteinases 2
(rHuTIMP-2)
PrimeGene Technical Data Sheet**

Catalog Number:	402-06
Source:	<i>Escherichia coli</i> .
Molecular Weight:	Approximately 21.8 kDa, a single non-glycosylated polypeptide chain containing 194 amino acids.
Quantity:	2µg/10µg/1000µg
AA Sequence:	CSCSPVHPQQ AFCNADVIR AKAVSEKEVD SGNDIYGNPI KRIQYEIKQI KMFKGPEKDI EFIYTAPSSA VCGVSLDVGG KKEYLIAGKA EGDGKMHITL CDFIVPWDTL STTQKKSLSNH RYQMGCECKI TRCPMIPCYI SSPDECLWMD WVTEKNINGH QAKFFACIKR SDGSCAWYRG AAPPKQEFLD IEDP
Purity:	> 95 % by SDS-PAGE and HPLC analyses.
Biological Activity:	Fully biologically active when compared to standard. The biologically active as determined by its ability to inhibit human MMP-2 cleavage of a fluorogenic peptide substrate Mca-PLGL-Dpa-AR-NH ₂ .
Physical Appearance:	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation:	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4, with 3 % trehalose.
Endotoxin:	Less than 1 EU/µg of rHuTIMP-2 as determined by LAL method.
Reconstitution:	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/ml. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.
Shipping:	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage:	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none">● 12 months from date of receipt, -20 to -70 °C as supplied.● 1 month, 2 to 8 °C under sterile conditions after reconstitution.● 3 months, -20 to -70 °C under sterile conditions after reconstitution.
Usage:	This material is offered by Shanghai PrimeGene Bio-Tech for research, laboratory or further evaluation purposes. NOT FOR HUMAN USE.

Human Tissue Inhibitor of Metalloproteinases 2

TIMPs-1 through -4 regulate the activity of zinc metalloproteases known as MMPs, ADAMs and ADAMTSs. Structurally, TIMPs contain two domains. The N-terminal domain binds to the active site of mature metalloproteases via a 1:1 non-covalent interaction, blocking access of substrates to the catalytic site. In addition, The C-terminal domain of TIMP-1 and TIMP-2 binds to the hemopexin-like domain of pro-MMP-9 and pro-MMP-2, respectively. The latter binding is essential for the cell surface activation of MMP-2 by MMP-14.