

ChemWhat Technical Data Sheet (TDS)

Catalog Number:	103-09
Source:	<i>Escherichia coli</i> .
Molecular Weight:	Approximately 29.7 kDa, a single non-glycosylated polypeptide chain containing 259 amino acids.
Quantity:	10µg/50µg/1000µg
AA Sequence:	VYLSECKTGN GKNYRGTM SK TKNGITCQKW SSTSPHRPRF SPATHPSEGL EENYCRNP DN DPQGPWCYTT DPEKRYDYCD ILECEEECMH CSGENYDGKI SKTMSGLEQC AWD SQSPHAH GYPSKFPNK NLKKNYCRNP DREL RPWCFT TDPNKRWELC DIPRCTTPPP SSGPTYQCLK GTGENYRGNV AVTVSGHTCQ HWSAQTPH TH NRTPENFPCK NLDENYCRNP DGKRAPWCH TNSQVRWEYC KIPSCDSSP
Purity:	> 95 % by SDS-PAGE and HPLC analyses.
Biological Activity:	Fully biologically active when compared to standard. The specific activity determined by an assay on anti-proliferation and anti-migration using endothelial cells in vitro and anti-angiogenesis in vivo is 5.5×10^5 IU/mg.
Physical Appearance:	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation:	Lyophilized from a 0.2 µm filtered concentrated solution in 20 mM NaAc, pH 5.5, 4 % mannitol.
Endotoxin:	Less than 1 EU/µg of rHuAngiostatin 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:	ChemWhat Limited in UK offers this branded product for research, development or further evaluation purposes. NOT FOR HUMAN USE.

Human Angiostatin

Angiostatin, is a ~30 kDa fragment of plasminogen that is encoded by the PLG gene in humans. It is produced, for example, by autoproteolytic cleavage of plasminogen, involving extracellular disulfide bond reduction by phosphoglycerate kinase. Furthermore, angiostatin can be cleaved from plasminogen by different metalloproteinases (MMPs), elastase, prostate-specific antigen (PSA), 13 kDa serine protease, or 24 kDa endopeptidase. Angiostatin is known to bind many proteins, especially to angiomotin and endothelial cell surface ATP synthase but also integrins, annexin II, C-met receptor, NG2 proteoglycan, tissue-type plasminogen activator, chondroitin sulfate proteoglycans, and CD26. It seems to involve inhibition of endothelial cell migration, proliferation and induction of apoptosis, but its mechanism of action is still unclear. Angiostatin is currently undergoing clinical trials for its use in anticancer therapy. Recombinant angiostatin is expressed in *E. coli*.