

ChemWhat Technical Data Sheet (TDS)

Catalog Number:	143-08
Source:	<i>Escherichia coli</i> .
Molecular Weight:	Approximately 24.3 kDa, a single non-glycosylated polypeptide chain containing 214 amino acids.
Quantity:	2µg/10µg/1000µg
AA Sequence:	KRGCSSSPK LLSQLKSQAN ITGNTASLLE PYILHQLNLT LTLRAACTEH PVAFPSEDML RQLSKPDFLS TVHATLGRVW HQLGAFRQQF PKIQDFPELE RARQNIQGIR NNVYCMARLL HPPLEIPEPT QADSGTSRPT TTAPGIFQIK IDSCRFLWGY HRFMGSVGRV FEEWGDGSRR SRRHSPLWAW LKGDHRIRPS RSSQSAMLRS LVPR
Purity:	> 96 % by SDS-PAGE and HPLC analyses.
Biological Activity:	Fully biologically active when compared to standard. The ED ₅₀ as determined by a cell proliferation assay using murine NIH-3T3 cells is less than 2.0 ng/ml, corresponding to a specific activity of > 5.0 × 10 ⁵ IU/mg.
Physical Appearance:	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation:	Lyophilized from a 0.2 µm filtered concentrated solution in 2 × PBS, 0.1 % Tween-80.
Endotoxin:	Less than 1 EU/µg of rRtOSM 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.

Rat Oncostatin-M

Oncostatin-M (OSM) is a multifunctional cytokine that belongs to the Interleukin-6 subfamily. Among the family members, OSM is most closely related to leukemia inhibitory factor (LIF) and it in fact utilizes the LIF receptor in addition to its specific receptor in the human. A biologically active OSM receptor has been previously described that consists of a heterodimer of leukemia inhibitory factor receptor (LIFR) and gp130. OSM is synthesized by stimulated T-cells and monocytes. Furthermore, the effects of OSM on endothelial cells suggest a pro-inflammatory role for OSM and endothelial cells possess a large number of OSM receptors. Recombinant murine OSM contains 215 amino acids and has a molecular mass of 22.4 kDa. It has approximately 48 % and 72 % amino acid sequence identity with human and murine OSM.