



Technical Data Sheet

Recombinant Human Oncostatin-M (rHu OSM)

Human Oncostatin M

Oncostatin M (OSM) is a growth and differentiation factor that participates in the regulation of neurogenesis, osteogenesis and hematopoiesis. Produced by activated T cells, monocytes and Kaposi's sarcoma cells, OSM can exert both stimulatory and inhibitory effects on cell proliferation. It stimulates the proliferation of fibroblasts, smooth muscle cells and Kaposi's sarcoma cells, but, inhibits the growth of some normal and tumor cell lines. It also promotes cytokine release (e.g. IL-6, GM-CSF and G-CSF) from endothelial cells, and enhances the expression of low-density lipoprotein receptor in hepatoma cells. OSM share several structural and functional characteristics with LIF, IL-6, and CNTF. Human OSM is active on murine cells.

Catalog Number:	RC214-19
Lot#:	Y10308051
Source:	<i>Escherichia coli</i> .
Molecular Weight:	Approximately 26.0 kDa, a single non-glycosylated polypeptide chain containing 227 amino acids.
Quantity:	2ug/10ug/1000µg
Purity:	>95% by SDS-PAGE and HPLC analyses.
Biological Activity:	Fully biologically active when compared to the standard. The ED ₅₀ as determined by the dose-dependent stimulation of the proliferation of human TF-1 cells is < 2 ng/ml, corresponding to a specific activity of > 5 × 10 ⁵ units/mg.
Physical Appearance:	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation:	Lyophilized from a 0.2µm filtered concentrated (1.0mg/ml) solution in PBS, pH 7.4.
AA Sequence:	AAIGSCSKEYRVLLGLOLQKOTDLMQDTSRLDPYIRIQGLDVPKLREHCRERPGAFPSEETLR GLGRRGFLOTLNATLGCVLHRLADLEQRLPKAQDLERSGLNIEDLEKLMARPNILGLRNNI YCMAQLLDNSDTAEPTKAGRGASQPPTPTPASDAFORKLEGCRFLHG YHRFMHSVGRVFS KWGESPNSRRHSPHQALRKGVRRTSPSRKGRMLMTRGQLPR
Endotoxin:	Less than 1EU/µg of rHuIL-1α as determined by LAL method.



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- 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 $\leq -20^{\circ}\text{C}$. Further dilutions should be made in appropriate buffered solutions.
- Storage:** This lyophilized preparation is stable at 2-8°C, but should be kept at -20°C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8°C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20°C to -70°C. Avoid repeated freeze/thaw cycles.
- Usage:** This material is offered by Bio Basic Inc for research, laboratory or further evaluation purposes. NOT FOR HUMAN USE.