

Recombinant Human Oncostatin-M

(rhOSM)

Catalog Number: 103-08

Description

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, OSH 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.

Synonyms OSM

AA Sequence AAIGSCSKEY RVLLGQLQKQ TDLMQDTSRL LDPYIRIQGL DVPKLREHCR

ERPGAFPSEE TLRGLGRRGF LQTLNATLGC VLHRLADLEQ RLPKAQDLER SGLNIEDLEK LQMARPNILG LRNNIYCMAQ LLDNSDTAEP TKAGRGASQP PTPTPASDAF QRKLEGCRFL HGYHRFMHSV GRVFSKWGES PNRSRRHSPH

QALRKGVRRT RPSRKGKRLM TRGQLPR

Source Escherichia coli

Molecular Weight Approximately 26.0 kDa, a single non-glycosylated polypeptide chain containing 227 amino

acids.

Purity >95% by SDS-PAGE and HPLC analyses.

Biological Activity Fully biologically active. The ED_{50} is < 2ng/ml, corresponding to $> 5 \times 10^5$ units/ml specific

activity, as determined by human TF-1 cell proliferation.

Physical Appearance White lyophilized powder.

Formulation Lyophilized from a 0.2µm filtered concentrated (1.0mg/ml) solution in PBS, pH 7.4.

Endotoxin $< 1EU/\mu g$ of growth factor as determined by LAL method.

Reconstitution Reconstitute in sterile distilled water containing 0.1% BSA to a concentration of 0.1-1.0

mg/mL.

Storage Store at -20°C after receiving. Upon reconstitution, store at 2-8°C for up to one week. For

maximal stability, aliquot and store at -20°C. Avoid repeated freeze/ thaw cycles.

Usage This product is for research use only. It is not approved for use in humans, animals, or *in vitro*

diagnostic procedures.