

## OSM (227aa), Human

**Cat. No.:** Z02728-1

**Size:** 1.0 mg

**Synonyms:** Oncostatin-M (OSM)(227a.a.) , Human;

### 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, 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 mouse cells.

### Amino Acid Sequence:

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00001 AAIGSCSKEY RVLLGQLQKQ TDLMQDTSRL LDPYIRIQGL
00041 DVPKLRHCR ERPGAFPSEE TLRGLGRRGF LQTLNATLGC
00081 VLHRLADLEQ RLPKAQDLER SGLNIEDLEK LQMARPNILG
00121 LRNNIYCMAQ LLDNSDTAEP TKAGRGASQP PTPTPASDAF
00161 QRKLEGCRFL HGYHRFMHSV GRVFSKWGES PNRSRRHSPH
00201 QALRKGVRRR RPSRKGKRLM TRGQLPR
```

**Source:** *E. coli*

**Species:** Human

**Biological Activity:** Fully biologically active when compared to standard. The ED<sub>50</sub> as determined by a cell proliferation assay using human TF-1 cells is less than 2 ng/ml, corresponding to a specific activity of > 5.0 × 10<sup>5</sup> IU/mg.

**Molecular Weight:** Approximately 25.8 kDa, a single non-glycosylated polypeptide chain containing 227 amino acids.

**Formulation:** Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4.

**Appearance:** Sterile Filtered White lyophilized (freeze-dried) powder.

**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.

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

**Endotoxin Level:** Less than 1 EU/µg of rHuOSM as determined by LAL method.

**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.