



# Recombinant Human Oncostatin M (227aa) (OSM)

20150227BB



**FOR RESEARCH ONLY! NOT FOR HUMAN USE!**

<b>Cat.-no.:</b>	<b>100-088S</b>
<b>Size:</b>	2 µg
<b>Lot. No.:</b>	According to product label

## Scientific Background

<b>Gene-ID (NCBI):</b>	5008
<b>Synonyms:</b>	OSM

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. Recombinant human Oncostatin M is a 25.7 kDa protein, containing 227 amino acid residues.

## Sequence

```
AAIGSCSKEY RVLGGQLQKQ TDLMQDTSRL LDPYIRIQGL
DVPKLRHCR ERPGAFPSEE TLRGLGRRGF LQTLNATLGC
VLHRLADLEQ RLPKAQDLER SGLNIEDLEK LQMARPNILG
LRNNIYCMAQ LLDNSDTAEP TKAGRGASQP PTPPASDAF
QRKLEGCRFL HGYHRFMHSV GRVFSKWGES PNRSRRHSPH
QALRKGVRRT RPSRKGKRLM TRGQLPR
```

## Database References

<b>Protein RefSeq:</b>	NP_065391.1
<b>Uniprot ID:</b>	P13725
<b>mRNA RefSeq:</b>	NM_020530.4

## Product Specifications

<b>Expressed in</b>	E. coli
<b>Purity</b>	> 98% by SDS-PAGE & HPLC analyses
<b>Endotoxin level</b>	< 0.1 ng /µg of protein (<1EU/µg).
<b>Formulation</b>	lyophilized
<b>Length (aa):</b>	227
<b>MW:</b>	25.7 kDa

**Biological Activity:** The ED50 as determined by the dose-dependent stimulation of the proliferation of human TF-1 cells is  $\leq 2$  ng/ml, corresponding to a specific activity of  $\geq 5 \times 10^5$  units/mg.



**AVOID REPEATED FREEZE AND THAW CYCLES!**