



Recombinant Human Oncostatin M (209aa) (OSM)

20150227BB



FOR RESEARCH ONLY! NOT FOR HUMAN USE!

Cat.-no.:	100-352S
Size:	2 µg
Lot. No.:	According to product label

Scientific Background

Gene-ID (NCBI):	5008
Synonyms:	OSM

Oncostatin M (OSM) is a growth and differentiation factor that participates in the regulation of neurogenesis, osteogenesis and hematopoiesis. Produced by activate 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. The human OSM gene encodes for a 252 amino acid polypeptide, containing 25 amino acid signal sequence for secretion and a 227 precursor protein. Proteolytic processing of this precursor removes an 18 amino acid C-terminal peptide and generates the mature OSM form. Recombinant human Oncostatin M is a 23.9 kDa protein, containing 209 amino acid residues

Sequence

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AAIGSCSKEY RVLGGQLQKQ TDLMQDTSRL LDPYIRIQGL
DVPKLRHCR ERPGAFPSEE TLRGLGRRGF LQTLNATLGC
VLHRLADLEQ RLPKAQDLER SGLNIEDLEK LQMARPNILG
LRNNIYCMAQ LLDNSDTAEP TKAGRGASQP PTPASPDAF
QRKLEGCRFL HGYHRFMHSV GRVFSKWGES PNRSRRHSPH
QALRKGVRR
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Database References

Protein RefSeq:	NP_065391.1
Uniprot ID:	P13725
mRNA RefSeq:	NM_020530.4

Product Specifications

Expressed in	E. coli
Purity	> 98% by SDS-PAGE & HPLC analyses
Endotoxin level	< 0.1 ng /µg of protein (<1EU/µg).
Formulation	lyophilized
Length (aa):	209
MW:	23.6 kDa

Biological Activity: The ED50 as determined by the dose-dependent stimulation of the proliferation of human TF-1 cells is ≤ 2.0 ng/ml, corresponding to a specific activity of ≥ 5 x 10⁵ units/mg.



AVOID REPEATED FREEZE AND THAW CYCLES!