

## Active Recombinant Rat Osm Protein (215 aa)

**Cat. No.** Osm-3190    **Lot. No.** (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant Rat Oncostatin M (rrOSM) produced in E. coli is a single non-glycosylated polypeptide chain containing 215 amino acids. A fully biologically active molecule, rrOSM has a molecular mass of 24.5 kDa analyzed by reducing SDS-PAGE and is obtained by proprietary chromatographic techniques.
<b>Species</b>	Rat
<b>Source</b>	E.coli
<b>ProteinLength</b>	215
<b>Description</b>	Oncostatin M (OSM) is a multifunctional cytokine, and belongs to Interleukin-6 (IL-6) subfamily, which also includes IL-11, leukemia inhibitory factor (LIF), ciliary neurotropic factor, cardiotrophin-1, and novel neurotrophin-1. In vivo, OSM is secreted from activated T cells, monocytes, neutrophils, and endothelial cells. OSM is related to LIF, and shares a receptor with LIF in human. Human OSM can bind to gp130 and recruit OSM Receptor $\beta$ or LIF Receptor $\beta$ to form a ternary complex. OSM stimulates the growth of different types of cells, including megakaryocytes, fibroblasts, vascular endothelial cells, and T cells. OSM inhibits the proliferation of several cancer cell lines, such as solid tissue tumor cells, lung cancer cells, melanoma cells, and breast cancer cells.
<b>Form</b>	Sterile Filtered White lyophilized (freeze-dried) powder.
<b>Bio-activity</b>	ED50 < 10 ng/mL, measured by a cell proliferation assay using Rat Embryo Brain

 Tel: 1-631-559-9269    1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)     Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

cells, corresponding to a specific activity of  $> 1 \times 10^5$  units/mg.

**Molecular Mass** 24.5 kDa, observed by reducing SDS-PAGE.

**AA Sequence**  
 MKRGCSSSSPKLLSQLKSQANITGNTASLLEPYILHQNLNLTTLRAACTEHPVAFPSE  
 DMLRQLSKPDFLSTVHATLGRVWHQLGAFRQQFPKIQDFPELERARQNIQGIRNNV  
 YCMARLLHPPLEIPEPTQADSGTSRPTTTAPGIFQIKIDSCRFLWGYHRFMGVSVGRV  
 FEEWGDGSRRSRRHSPLWAWLKGDRIRPSRSSQSAMLRSLVPR

**Endotoxin** < 0.2 EU/μg, determined by LAL method.

**Purity** > 95% as analyzed by SDS-PAGE and HPLC.

**Storage** Lyophilized recombinant Rat Oncostatin M (rrOSM) remains stable up to 6 months at -80 centigrade from date of receipt. Upon reconstitution, rrOSM remains stable up to 2 weeks at 4 centigrade or up to 3 months at -20 centigrade.

**Storage Buffer** Lyophilized after extensive dialysis against PBS.

**Reconstitution** Reconstituted in ddH<sub>2</sub>O or PBS at 100 μg/mL.

## GENE INFORMATION

**Gene Name** [Osm oncostatin M \[ Rattus norvegicus \]](#)

**Official Symbol** [Osm](#)

**Synonyms** OSM; oncostatin M;

**Gene ID** [289747](#)

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mRNA Refseq [NM\\_001006961](#)

Protein Refseq [NP\\_001006962](#)

UniProt ID [Q65Z15](#)

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