

## Product Datasheet

### Recombinant OSM, Rat (orb1494781)

<b>Catalog Number</b>	orb1494781
<b>Category</b>	Proteins
<b>Description</b>	<p>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 <math>\beta</math> or LIF Receptor <math>\beta</math> 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. 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 at GenScript.</p>
<b>Form/Appearance</b>	Lyophilized after extensive dialysis against PBS.
<b>Buffer/Preservatives</b>	Lyophilized after extensive dialysis against PBS.
<b>Purity</b>	> 95% as analyzed by SDS-PAGE and HPLC.
<b>Purification</b>	> 95% as analyzed by SDS-PAGE and HPLC.
<b>Protein Sequence</b>	MKRGCSSES PKLLSQLKSQ ANITGNTASL LEPYILHQNL NTLTLRAACT EHPVAFPSD MLRQLSKPDF LSTVHATLGR VWHQLGAFRQ QFPKIQDFPE LERARQNIQG IRNNVYCMAR LLHPPLEIPE PTQADSGTSR PTTTAPGIFQ IKIDSCRFLW GYHRFMGSVG RVFEEWGDGS RRSRRHSPLW AWLKGDRIR PSRSSQSAML RSLVPR
<b>MW</b>	24.5 kDa, observed by reducing SDS-PAGE.
<b>Application notes</b>	Reconstituted in ddH <sub>2</sub> O or PBS at 100 $\mu$ g/ml.

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<b>Endotoxins</b>	0.2 EU/ $\mu$ g, determined by LAL method.
<b>Source</b>	Escherichia coli.
<b>Biological Activity</b>	ED50 $1 \times 10^5$ units/mg.
<b>Storage</b>	Lyophilized recombinant Rat Oncostatin M (rrOSM) remains stable up to 6 months at $-80^{\circ}\text{C}$ from date of receipt. Upon reconstitution, rrOSM remains stable up to 2 weeks at $4^{\circ}\text{C}$ or up to 3 months at $-20^{\circ}\text{C}$ .
<b>Note</b>	For research use only
<b>Expiration Date</b>	6 months from date of receipt.

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