

# Oncostatin-M, mouse recombinant (rmOSM)

Catalog No: 97589 Lot No: XXXXX Source: *E. coli* 

**Synonyms:** Oncostatin-M, OSM, OncoM

### **Background**

Oncostatin M is a member of a cytokine family that includes leukemia-inhibitory factor, granulocyte colony-stimulating factor, and interleukin 6. This gene encodes a growth regulator which inhibits the proliferation of a number of tumor cell lines. It regulates cytokine production, including IL-6, G-CSF and GM-CSF from endothelial cells.

### Description

OSM mouse recombinant produced in *E. coli* is a single, non-glycosylated polypeptide chain containing 181 amino acids and having a molecular mass of 20.4 kDa. OSM is purified by proprietary chromatographic techniques.

#### **Physical Appearance**

Sterile filtered white lyophilized (freeze-dried) powder.

#### **Formulation**

The OSM protein was lyophilized from a 0.2 µm filtered concentrated solution in 1xPBS, pH 7.4.

#### Solubility

It is recommended to reconstitute the lyophilized Oncostatin M in sterile 18 M $\Omega$ -cm H $_2$ O not less than 100  $\mu$ g/ml, which can then be further diluted to other aqueous solutions.

### Stability

Lyophilized Oncostatin M, although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution Oncostatin should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

#### Purity

Greater than 95.0% as determined by (a) Analysis by RP-HPLC, (b) Analysis by SDS-PAGE.

# **Amino Acid Sequence**

NRGCSNSSSQ LLSQLQNQAN LTGNTESLLE PYIRLQNLNT PDLRAACTQH SVAFPSEDTL RQLSKPHFLS TVYTTLDRVL YQLDALRQKF LKTPAFPKLD SARHNILGIR NNVFCMARLL NHSLEIPEPT QTDSGASRST TTPDVFNTKI GSCGFLWGYH RFMGSVGRVF REWDDGSTRS R

# Activity

The ED50 as determined by the dose-dependent stimulation of the proliferation of NIH-3T3 mouse embryonic fibroblast cells is <1 ng/ml, corresponding to a specific activity of  $>1.0 \times 10^6$  units/mg.

### Usage

This product is offered by Biomol for research purposes only. Not for diagnostic purposes or human use. It may not be resold or used to manufacture commercial products without written approval of Biomol GmbH.