

OSM

Catalog # PVGS1334

Specification

OSM - Product Information

Primary Accession Species Mouse

Sequence Asn25-Arg205, expressed with an N-terminal Met

Purity

> 95% as analyzed by SDS-PAGE
> 95% as analyzed by HPLC

Endotoxin Level < 0.2 EU/ µg of protein by gel clotting method

Biological Activity

ED < sub > 50 < /sub > < 10.0 ng/ml, measured by a cell proliferation assay using Rat Embryo Brain cells, corresponding to a specific activity of $> 1.0 \times 10 < sup > 5 < /sup > units/mg$.

P53347

Expression System E. coli

Formulation

Lyophilized after extensive dialysis against PBS.

Reconstitution

It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH_2O or PBS up to 100 µg/ml.

Storage & Stability

Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

OSM - Additional Information

Gene ID 18413

Other Names Oncostatin-M, OSM, Osm

Target Background

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 neurotropin-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 β or LIF Receptor β 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.

OSM - Protein Information

Name Osm

Function

Growth regulator. 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 (By similarity). Uses only type II OSM receptor (heterodimers composed of OSMR and IL6ST). Involved in the maturation of fetal hepatocytes, thereby promoting liver development and regeneration (By similarity).

Cellular Location Secreted.

OSM - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>
- **OSM Images**