

OSM
Catalog # PVGS1662

Specification

OSM - Product Information

Primary Accession [Q65Z15](#)
Species
Rat

Sequence
Lys26-Arg239

Purity
> 96% as analyzed by SDS-PAGE
> 96% as analyzed by HPLC

Endotoxin Level
< 1 EU/ µg of protein by LAL method

Biological Activity
The ED₅₀ as determined by a cell proliferation assay using murine NIH-3T3 cells is less than 2.0 ng/ml, corresponding to a specific activity of 5.0×10^5 IU/mg.

Expression System
E. coli

Theoretical Molecular Weight
24.3 kDa

Formulation **Lyophilized from a 0.2 µm filtered solution in 2 × PBS, 0.1 % Tween-80.**

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 sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/ml.

Storage & Stability
Upon receiving, this product remains stable for up to 6 months at -20°C or -70°C. Upon reconstitution, the product should be stable for up to 1 week at 2-8°C or up to 3 months at -20°C. Avoid repeated freeze-thaw cycles.

OSM - Additional Information

Gene ID 289747

Other Names
Oncostatin-M, OSM, Osm

Target Background
Oncostatin-M (OSM) is a multifunctional cytokine that belongs to the Interleukin-6 subfamily.

Among the family members, OSM is most closely related to leukemia inhibitory factor (LIF) and it in fact utilizes the LIF receptor in addition to its specific receptor in the human. A biologically active OSM receptor has been previously described that consists of a heterodimer of leukemia inhibitory factor receptor (LIFR) and gp130. OSM is synthesized by stimulated T-cells and monocytes. Furthermore, the effects of OSM on endothelial cells suggest a pro-inflammatory role for OSM and endothelial cells possess a large number of OSM receptors. Recombinant murine OSM contains 215 amino acids and has a molecular mass of 22.4 kDa. It has approximately 48 % and 72 % amino acid sequence identity with human and murine OSM.

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.

Cellular Location

Secreted.

Tissue Location

Widely expressed. Expressed at higher levels in liver, skin and spleen.

OSM - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

OSM - Images