

Rev03
 Update: Dec,14,2021

DATASHEET

OSM, Rat

Cat. No.: Z03588

Product Introduction

Species	Rat
Protein Construction	OSM (Lys26-Arg239) Accession # Q65Z15
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 ED ₅₀ 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.

Background

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.

Synonyms : Oncostatin-M

For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.