

Recombinant Murine Oncostatin-M

#R00246

Size: 10 µg/100 µg/500 µg

Stability & Storage

Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 3 months, -20 to -70 °C under sterile conditions after reconstitution.



Warning: This product is intended for scientific research only. It is not to be used for medical or diagnostic procedures in humans or animals, nor as a food, cosmetic, or household product.

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 181 amino acids and has a molecular mass of 20.4 kDa. It has approximately 48 % and 72 % amino acid sequence identity with human and rat OSM.

AA Sequence

NRGCSNSSSQLLSQLQNQANLTGNTESLLEPYIRLQN
LNTPDRLRAACTQHSVAFPSSEDTLRQLSKPHFLSTVYT
TLDRVLYQLDALRQKFLKTPAFPKLDSARHNILGIRNN
VFCMARLLNHSLEIPEPTQTDSGASRSTTTDPVFNTK
IGSCGFLWGYHRFMGSVGRVFWDDGSTRSR

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/ml. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.

Product Specification

Synonyms	
Accession	P53347
GeneID	18413
Species	Murine
Source	Escherichia coli.
Molecular Weight	Approximately 20.4 kDa, a single non-glycosylated polypeptide chain containing 181 amino acids.
Purity	> 96 % by SDS-PAGE and HPLC analyses.
Biological Activity	Fully biologically active when compared to standard. The ED ₅₀ as determined by a cell proliferation assay using murine NIH-3T3 cells is less than 1.0 ng/ml, corresponding to a specific activity of > 1.0 × 10 ⁶

IU/mg.

Physical Appearance Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation Lyophilized from a 0.2 µm filtered concentrated solution in 2 × PBS, pH 7.4, 5 % trehalose.

Endotoxin Less than 1 EU/µg of rMuOSM as determined by LAL method.