

BACKGROUND:

Oncostatin M (OSM) is a cytokine that is produced by macrophages, dendritic cells, and T lymphocytes during inflammatory events. The Type-I and Type-II OSM receptors are located on the cell surface of endothelial and tumor cells, contain the glycoprotein 130 (gp130) subunit, and activate the JAK/STAT signaling pathway. OSM functions to inhibit tumor cell proliferation, induce liver stem cell maturation, regulate cytokine production during hematopoiesis and inflammation, stimulate bone formation, and promote nervous system development.

Recombinant human Oncostatin M is a non-glycosylated protein monomer, containing 210 amino acids and having a molecular mass of 23.8 kDa.

Cat. No.:
RP1056

Alternate Names:
Onc-M

AA Sequence:
MAAIGSCSKE YRVLLGQLQK QTDLMQDTSR LLDPYI
RIQG LDVPKLREHC RERPGAFPSE ETLRGLGRRG FL
QTLNATLGCVLHRLADLE QRLPKAQDLE RSGLNIEDLE
KLQMARPNIL GLRNNIYCMA QLLDNSDTAE PTKAGR
GASQ PPTPTPASDA FQRKLEGCRFLHGYHRFMHS VG
RVFSKWGE SPNRSRRHSP HQALRKGVRR

TECHNICAL INFO

Source:
E. coli

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

Formulation:
10 mM sodium phosphate, pH 7.5

Stability:
Lyophilized product is very stable at -20°C. Reconstituted material should be aliquoted and frozen at -20°C. It is recommended that a carrier protein (0.1% HSA or BSA) is added for long term storage.

Reconstitution:
Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at 0.1 mg/mL, which can be further diluted into other aqueous solutions.

Protein Content and Purity determined by:

- UV spectroscopy at 280 nm.
- RP-HPLC calibrated against a known standard.
- Quantitation against a known standard via reducing and non-reducing SDS-PAGE gels.

Endotoxin Level:
Endotoxin level, as measured by LAL analysis, is <0.01ng/ug or <0.1EU/ug.

Biological Activity:
The activity is measured by dose-dependent T11 cell proliferation, with Bioactivity Acceptance Criteria ED50 at 4 ng/mL.

