RECOMBINANT HUMAN ONCOSTATIN (hOSM)

Catalog # 02644	10 mg per vial
Catalog # 02844	50 mg per vial

PRODUCT DESCRIPTION:

OSM is a pleiotropic cytokine produced by activated T cells, monocytes, and Kaposi's sarcoma cells. OSM inhibits the growth of some tumour and normal cell lines, simulates fibroblast, smooth muscle and Kaposi's sarcoma cell proliferation, cytokine release from endothelial cells and low density lipoprotein receptor expression on hepatoma cells. Human OSM cDNA encodes a 252 amino acid pre-pro-OSM polypeptide with a 25 residue signal peptide and a hydrophilic C-terminal domain that are proteolytically processed to generate the 196 residue mature OSM protein. OSM binds to LIF-R α -chain and gp130 subunit.

SOURCE:

A DNA sequence encoding the mature, C-terminal processed, 196 amino acid residue form of human OSM was expressed in *E. coli*.

PURITY:

Greater than 97%, as determined by SDS-PAGE and visualized by silver stain. Endotoxin level less than 0.1 ng per 1 μ g of the cytokine as determined by the LAL method.

FORMULATION:

Lyophilized from a 0.2 μ m filtered solution in 35% acetonitrile plus 0.1% TFA containing 50 μ g of bovine serum albumin per 1 μ g of cytokine.

RECONSTITUTION:

It is recommended that sterile phosphate-buffered saline containing at least 0.1% human serum albumin or bovine serum albumin be added to the vial to prepare a stock solution of no less than $10 \,\mu\text{g/mL}$.

STABILITY/STORAGE:

Lyophilized samples are stable for greater than six months at -20°C to -70°C.

Reconstituted OSM can be stored under sterile conditions at 2°C to 4°C for one month or at -20°C to -70°C for three months without detectable loss of activity.

Avoid repeated freeze-thaw cycles.

ACTIVITY:

Activity was determined in a cell proliferation assay using a factor-dependent human erythroleukemic cell line, TF-1 and the ED_{50} for this effect was typically 0.15 - 0.3 ng/mL.

THIS REAGENT IS FOR RESEARCH USE ONLY. IT IS NOT TO BE ADMINISTERED TO HUMANS.