

Oncostatin M, rat recombinant

CATALOG #:	7182-10	10 µg
	7182-50	50 µg
ALTERNATE NAMES:	OSM	
SOURCE:	E. Coli	
PURITY:	≥ 98% by SDS-PAGE gel and HPLC analyses	
MOL. WEIGHT:	24.4 kDa	
ENDOTOXIN LEVEL:	< 0.1 ng/µg of protein (<1EU/µg).	
FORM:	Lyophilized	
FORMULATION:	Sterile filtered through a 0.2 micron filter. Lyophilized with no additives	
STORAGE CONDITIONS:	Store at -20°C. After reconstitution, aliquot and store at -20°C to -80°C. Avoid repeated freezing and thawing cycles.	

RECONSTITUTION:

Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 week. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.

DESCRIPTION:

Oncostatin M (OSM) is a growth and differentiation factor that participates in the regulation of neurogenesis, osteogenesis and hematopoiesis. Produced by activated T cells, monocytes and Kaposi's sarcoma cells, OSM can exert both stimulatory and inhibitory effects on cell proliferation. It stimulates the proliferation of fibroblasts, smooth muscle cells and Kaposi's sarcoma cells, but, inhibits the growth of some normal and tumor cell lines. It also promotes cytokine release (e.g. IL-6, GM-CSF and G-CSF) from endothelial cells, and enhances the expression of low-density lipoprotein receptor in hepatoma cells. OSM share several structural and functional characteristics with LIF, IL-6, and CNTF. Human OSM is active on murine cells. Recombinant rat Oncostatin M is a 24.4 kDa protein, containing 215 amino acid residues.

AMINO ACID SEQUENCE:

MKRGCSSSSP KLLSQLKSQA NITGNTASLL EPYILHQNLN TLTLRAACTE
HPVAFPSEDM LRQLSKPDFL STVHATLGRV WHQLGAFRQQ FPKIQDFPEL
ERARQNIQGI RNNVYCMARL LHPPLEIPEP TQADSGTSRP TTTAPGIFQI
KIDSCRFLWG YHRFMGSVGR VFEEWGDGSR RSRRHSPPLWA WLKGDHRIRP
SRSSQSAMLR SLVPR

BIOLOGICAL ACTIVITY:

Assay #1: Determined by its ability to stimulate the proliferation of rat C6 cells. The expected ED₅₀ is 3.0-5.0 µg/ml.

Assay #2: Determined by its ability to inhibit Alkaline phosphatase activity of differentiated MC3T3 E1 cells.

RELATED PRODUCTS:

- Oncostatin M, human recombinant (**Cat # 4466-10, -1000**)
- Human Cell^{exp} Human Recombinant Oncostatin M (**Cat # 6475-10, -50**)

FOR RESEARCH USE ONLY! Not to be used in humans.