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## **Osm**

## **Recombinant Mouse Oncostatin M**

Catalog No. CRM535A Quantity: 20 μg

CRM535B 100 µg

CRM535C 1.0 mg

Alternate Names: Oncostatin-M, OSM

**Description:** Oncostatin M (OSM) is a glycoprotein belonging to the interleukin-6 family of cytokines

that has functions mainly in cell growth. OSM is considered as a pleiotropic cytokine that signals through cell surface receptors type I and type II both contain protein gp13, with

roles in biometabolism processes including liver development, haematopoeisis,

inflammation, bone formation and destruction and possibly CNS development. OSM was previously identified by its ability to inhibit the growth of cells from melanoma and other solid tumors. It also has been reported that OSM, like LIF, IL-6 and G-CSF, has the ability to inhibit the proliferation of murine M1 myeloid leukemic cells and can induce their differentiation into macrophage-like cells. Human OSM is produced as a precursor containing 252 amino acids, with an initial 25 amino acids secretory signal peptide and which on removal yields the soluble 227 amino acid pro-OSM. Removal of the C-teminal

31 amino acids produces the fully active 196 residue form.

UniProt ID: P53347

Protein Construction: A DNA sequence encoding the mouse OSM (Ala24-Arg206) was expressed with an initial

Met at the N-terminal.

Source: E. coli

**Formulation:** Lyophilized from sterile PBS, pH 7.4.

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants

before lyophilization.

Molecular Weight: The rmOSM consists of 184 aa with a predicted MW of 20.7 KDa and migrates at ~23

KDa in SDS-PAGE under reducing conditions.

**Purity:** > 95 % as determined by SDS-PAGE.

Biological Activity: 1. Measured by its ability to inhibit proliferation of M1 mouse myeloid leukemia cells. The

ED50 for this effect is typically 10-50 ng/mL.

2. Measured in a cell proliferation assay using NIH3T3 cells. The ED50 for this effect is

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typically 8-32 ng/mL.

Predicted N-terminal: Met

**Reconstitution:** Centrifuge vial prior to opening. Add sterile distilled water to a concentration of 0.1

mg/mL and gently pipette the solution up and down the sides of the vial. **DO NOT VORTEX**. Allow several minutes for complete reconstitution.

Storage & Stability: Stable for up to 1 year from date of receipt at -20°C to -80°C

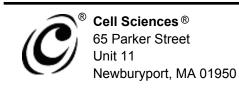
After reconstitution, store working aliquots at -20°C to -80°C.

Toll Free: 888-769-1246

Phone: 978-572-1070

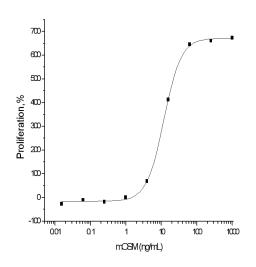
Fax: 978-992-0298

Avoid repeated freeze-thaw cycles.

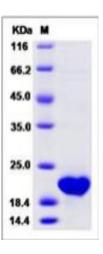


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Measured in a cell proliferation assay using NIH3T3 cells. The ED50 for this effect is typically 8-32 ng/mL.



SDS-PAGE



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