# Csf1
# Recombinant Mouse M-CSF, Animal Free

| | | | |
|---|---|---|---|
| **Catalog No.** | CRM008A-AF | **Quantity:** | 2 µg |
| | CRM008B-AF | | 10 µg |
| | CRM008C-AF | | 1.0 mg |

**Alternate Names:** Macrophage Colony Stimulating Factor, CSF-1

**Description:** Macrophage Colony Stimulating Factor (M-CSF) is a hematopoietic cytokine/ growth factor produced by a wide variety of cells. M-CSF controls the production, differentiation, and function of macrophages. The active form of the protein is found extracellularly as a disulfide-linked homodimer, and is thought to be produced by proteolytic cleavage of membrane-bound precursors. M-CSF acts through the CSF receptor 1.

**Gene ID:** 12977

**UniProt ID:** P07141

**Source:** *E. coli*

**Molecular Weight:** Dimer, 18.2/36.4 kDa (156/312 aa)

**Formulation:** Lyophilized from a sterile-filtered aqueous solution containing 10mM sodium phosphate, 50 mM sodium chloride, pH 7.5.

**Purity:** ≥ 95% by reducing and non-reducing SDS-PAGE

**Endotoxin Level:** ≤ 1 EU/µg of protein by kinetic LAL

**Biological Activity:** $ED_{50}$ ≤ 10 ng/ml, determined by dose-dependent proliferation of M-NFS-60 cells.

**Specific Activity:** ≥ $1.0 \times 10^5$ U/mg

**Amino Acid Sequence:** MKEVSEHCSH MIGNGHLKVL QQLIDSQMET SCQIAFEFVD QEQLDDPVCY LKKAFFLVQD IIDETMRFKD NTPNANATER LQELSNNLNS CFTKDYEEQN KACVRTFHET PLQLLEKIKN FFNETKNLLE KDWNIFTKNC NNSFAKCSSR DVVTKP

**Reconstitution:** **Centrifuge vial prior to opening.** Add sterile distilled water to a concentration of 0.1 mg/ml. Suspend the product by gently pipetting the above recommended solution down the sides of the vial. Allow several minutes for complete reconstitution. **DO NOT VORTEX.** Further dilution should be made in appropriate buffered solutions.

**Storage & Stability:** Lyophilized product is stable at room temperature for shipping purposes. Store as supplied at -20°C to -80°C for up to 1 year.

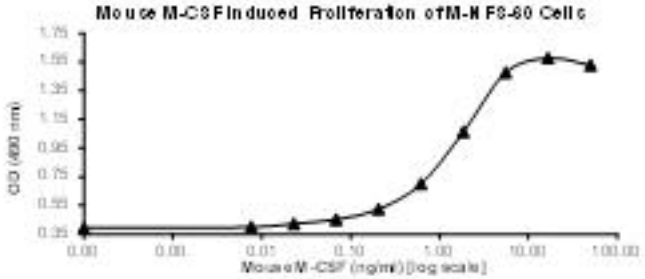
Upon reconstitution, the preparation is stable for up to one month at 2-8°C. For long term storage, freeze in working aliquots and store at -20 to -80°C. For maximal stability, dilute to working aliquots in a 0.1% BSA solution.
**Avoid repeated freeze-thaw cycles.**

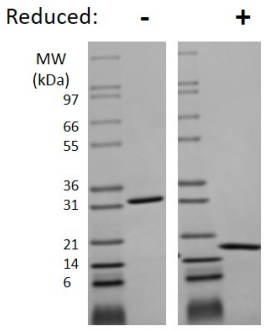
**Cell Sciences**®
65 Parker Street
Unit 11
Newburyport, MA 01950

Toll Free: 888-769-1246
Phone: 978-572-1070
Fax: 978-992-0298

E-mail: info@cellsciences.com
Website: www.cellsciences.com

Figure 1: Serial dilutions of Mouse M-CSF, starting at 50 ng/mL, were added to NFS-60 cells. Cell proliferation was measured after 44 hours and the linear portion of the curve was used to calculate the ED50.




**Mouse M-CSF Gel**
Figure: 1 ug run under (+) reducing conditions and (-) non-reducing conditions in a 4-20% Tris-Glycine gel, stained with Coomassie Blue. Mouse M-CSF is a homodimer with a total predicted MW of 36.4 kDa (18.2 kDa each monomer). The observed molecular weight of the dimer is between 31-36 kDa.

**NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.**

**Cell Sciences** ®
65 Parker Street
Unit 11
Newburyport, MA 01950

Toll Free: 888-769-1246
Phone: 978-572-1070
Fax: 978-992-0298

E-mail: info@cellsciences.com
Website: www.cellsciences.com