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CSF1
Recombinant Human Macrophage Colony Stimulating Factor Animal Free

Catalog No.	CRM151B-AF	**Quantity:**	10 µg
	CRM151C-AF		1.0 mg
	CRM151D-AF		100 µg

Alternate Names: M-CSF, CSF-1, MCSF

Description: Macrophage Colony Stimulating Factor (M-CSF), also called CSF-1, is a hematopoietic growth factor that is involved in the proliferation, differentiation, and survival of monocytes, macrophages, and bone marrow progenitor cells. It is produced by osteoblasts (as a result of endocrine stimulation by parathyroid hormone), exerts paracrine effects on osteoclasts, and can interact with CSF1R. M-CSF is a four α-helical bundle cytokine and its active form is found extracellularly as a disulfide-linked homodimer thought to be produced by proteolytic cleavage of membrane-bound precursors.

Made without animal-derived components in an animal-free facility.

UniProt (ID): P09603

Source: *E. coli*

Molecular Weight: 18.5/37.1 kDa (159/318 aa) dimer

Formulation: Lyophilized from a sterile filtered solution in 10 mM sodium phosphate, 100 mM sodium chloride, pH 8.0.

Purity: >95% by reducing and non-reducing SDS-PAGE

Endotoxin Level: ≤ 0.1 EU/µg by kinetic LAL analysis

Biological Activity: ED_{50} ≤10 ng/ml, determined by a cell proliferation assay using mouse NFS-60 cells.

Specific Activity: ≥ 1 x 10^5 units/mg
The WHO International Standard (NIBSC code: 89/512) for rhM-CSF was tested in the in-house assay. To convert the in-house specific activity value to specific activity in International units (IU), multiply by 0.60

Amino Acid Sequence: MEEVSEYCSH MIGSGHLQSL QRLIDSQMET SCQITFEFVD QEQLKDPVCY LKKAFLLVQD IMEDTMRFRD NTPNAIAIVQ LQELSLRLKS CFTKDYEEHD KACVRTFYET PLQLLEKVKN VFNETKNLLD KDWNIFSKNC NNSFAECSSQ GHERQSEGS

Reconstitution: **Centrifuge vial prior to opening.** Add sterile distilled water to a concentration of 0.1 mg/mL. **DO NOT VORTEX.** Allow several minutes for complete reconstitution. Further dilutions should be made in appropriate buffered solutions.

Storage & Stability: Store as supplied at -20 °C to -80 °C for up to one year. Upon reconstitution, preparation is stable for one month at 2-8 °C. For longer term, prepare working aliquots containing 0.1% BSA and store at -20 °C to -80 °C. **Avoid repeated freeze-thaw cycles.**

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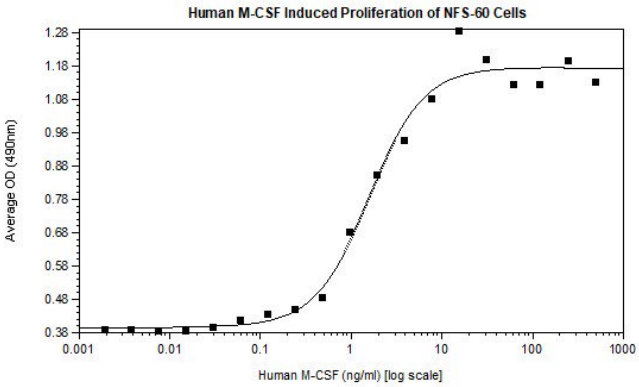

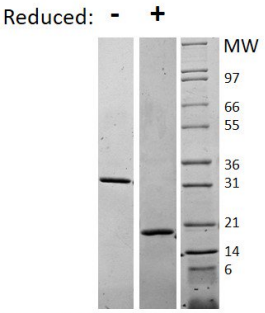

Human M-CSF

Figure: 1 ug run under (+) reducing conditions and (-) non-reducing conditions in a 4-20% Tris-Glycine gel, stained with Coomassie Blue. Human M-CSF is a homodimer with a total predicted MW of 37.1 kDa.

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

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