DATASHEET
Version 20181206

M-CSF, Mouse

Cat. No.: Z03275-50

Size: 50.0 ug

Synonyms: Macrophage Colony Stimulating Factor, CSF-1, MGI-IM, M-CSF

Description:

Macrophage Colony Stimulating Factor (M-CSF) ,also known as CSF1,is a potent hematopoietic factor produced by a variety of cells including lymphocytes, monocytes, fibroblasts, endothelial cells, myoblasts and osteoblasts. 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. It is a key regulator of cellular proliferation, differentiation, and survival of blood monocytes, tissue macrophages and their progenitor cells.M-CSF affects macrophages and monocytes in several ways, including stimulating increased phagocytic and chemotactic activity, and increased tumour cell cytotoxicity.M-CSF is clinically used in the treatment of infection, malignancies and atherosclerosis. It facilitates hematopoietic recovery after bone marrow transplantation.
Recombinant mouse Macrophage Colony Stimulating Factor (M-CSF) produced in *E. coli* is a disulfide-linked homodimer containing two non-glycosylated polypeptide chains of 156 amino acids each. A fully biologically active molecule, rmM-CSF has a molecular mass of 30 kDa analyzed by reducing SDS-PAGE and is obtained by chromatographic techniques at GenScript.

Amino Acid Sequence:

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00001 MKEVSEHCSH MIGNGHLKVL QQLIDSQMET SCQIAFEFVD
00041 QEQLDDPVCY LKKAFFLVQD IIDETMRFKD NTPNANATER
00081 LQELSNNLNS CFTKDYEEQN KACVRTFHET PLQLLEKIKN
00121 FFNETKNLLE KDWNIFTKNC NNSFAKCSSR DVVTKP
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Source: *E. coli*

Species: Mouse

Biological Activity: ED_{50}< 3 ng/ml, measured in a cell proliferation assay using Murine M-NFS-60 cells, corresponding to a specific activity of > 3.3×10^5 units/mg.

Molecular Weight: 30 kDa, observed by reducing SDS-PAGE.

Formulation: Lyophilized after extensive dialysis against 50mMTris,150mMNaCl, pH 8.0.

Reconstitution: Reconstituted in ddH_2O at 100 μg/ml.

Purity: > 95% as analyzed by SDS-PAGE.

Endotoxin Level: < 0.2 EU/μg, determined by LAL method.

Storage: Lyophilized recombinant Mouse Macrophage Colony Stimulating Factor(M-CSF) remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, Mouse M-CSF should be stable up to 1 week at 4°C or up to 2 months at -20°C.

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