

### **Datasheet**

# **Macrophage Colony Stimulating Factor**

## **Murine Recombinant**

Product	Description	Catalogue-No.	Size
M-CSF	Macrophage colony stimulating factor, murine recombinant	P-4390002 P-4390010	2 μg 10 μg

#### **Product description**

Synonyms: MCSF, CSF-1, lanimostim

Granulocyte-macrophage colony-stimulating factors are cytokines that act in hematopoiesis by controlling the production, differentiation, and function of two related white cell populations of the blood, the granulocytes and the monocytes-macrophages. M-CSF induces cells of the monocyte/macrophage lineage. Macrophage colony stimulating factor (M-CSF) plays a role in immunological defenses, bone metabolism, lipoprotein clearance, fertility and pregnancy. M-CSF (murine recombinant, produced in E. coli) is a non-glycosylated, disulfide-inked homodimer polypeptide chain containing 2 x 156 amino acids and having a total molecular mass of 36.4 kD. M-CSF is purified by proprietary chromatographic techniques.

#### Solubility and storage conditions

It is recommended to reconstitute the lyophilized M-CSF in sterile, distilled water not less than 100  $\mu$ g/ml which can then be further diluted to other aqueous solutions. Lyophilized M-CSF although stable at room temperature for 3 weeks, should be stored desiccated below -20 ° C. Upon reconstitution M-CSF can be stored at 2-8 ° C for up to 7 days and should be stored for future use below -20 ° C. Please prevent freeze-thaw cycles.

#### Composition

Sterile filtered white lyophilized (freeze-dried) powder. The protein was lyophilized from 0.5 x PBS, pH 8.0.

Purity: Greater than 97.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE. Biological activity: The ED50, as calculated by the dose-dependent stimulation of the proliferation of murine M-NFS-60 indicator cells is typically 1.1 - 1.6 ng/ml corresponding to 900,000-600,000 U/mg Amino acid sequence: MKEVSEHCSH MIGNGHLKVL QQLIDSQMET SCQIAFEFVD QEQLDDPVCY LKKAFFLVQD IIDETMRFKD NTPNANATER LQELSNNLNS CFTKDYEEQN KACVRTFHET PLQLLEKIKN FFNETKNLLE KDWNIFTKNC NNSFAKCSSR DVVTKP

#### Suitability

FOR RESEARCH USE ONLY!

Not approved for human or animal diagnostic or therapeutic procedures.

## **Technical Support**

For technical support, questions or remarks please contact your local PAN-Biotech partner or the technical department of PAN-Biotech via email (<a href="mailto:info@pan-biotech.com">info@pan-biotech.com</a>) or phone +49-8543-601630.

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