

**TECHNICAL DATA SHEET**

# Recombinant Mouse M-CSF (Carrier-free)

Catalog Number: 21-8983

**RPx-Pro™ Recombinant Protein**  
PRODUCT INFORMATION

**CONTENTS**

Recombinant Mouse M-CSF (Carrier-free)

**DESCRIPTION**

M-CSF is a hematopoietic growth factor that drives macrophage, monocyte, and bone marrow progenitor cell proliferation, differentiation, and survival. M-CSF increases macrophage and monocyte phagocytosis, chemotaxis, and tumoricidal activity making it an important therapeutic agent. M-CSF is used clinically for treatment of cancer, infectious diseases, and atherosclerosis. It is also used in recovery following bone marrow transplants. M-CSF is elaborated by multiple cells including lymphocytes, monocytes, fibroblasts, endothelial cells, myoblasts, and osteoblasts. M-CSF has also been associated with dermal thickening, pregnancy maintenance and female and male fertility.

**MOLECULAR MASS**

Recombinant Mouse M-CSF is a 36.4 kDa homodimeric protein containing two 156 amino acid polypeptide subunits.

**AMINO ACID SEQUENCE**

MKEVSEHCSH MIGNGHLKVL QQLIDSQMET SCQIAFEFVD QEQLDDPVCY LKKAFFLVQD IIDETMRFKD NTPNANATER  
LQELSNLNS CFTKDYEEQN KACVRTFHET PLQLLEKIKN FFNETKNLLE KDOWNIFTKNC NNSFAKCSSR DVVTKP

**SOURCE**

E. coli

**APPLICATIONS**

Bioassay

**PURITY**

98 %

**STORAGE**

-20°C

**PROTEIN CONTENT**

Content Verified by UV Spectroscopy and/or SDS-PAGE

**ENDOTOXIN LEVEL**

Endotoxin level is <0.1 ng/μg of protein (<1 EU/μg).

**AUTHENTICITY**

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

**CROSS REACTIVITY**

Human, Rat

**BIOACTIVITY**

ED<sub>50</sub> <1.0 ng/ml, corresponding to a specific activity of >1 x 10<sup>6</sup> units/mg is calculated by proliferation of M-NFS-60 cells.

**RESEARCH AREAS**

Cancer; Proliferation; Stem Cells & Differentiation

**RECONSTITUTION**

See Certificate of Analysis (COA) for lot specific reconstitution information.

**REFERENCES**

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Nemunaitis J 1993 Crit Rev Oncol Hematol 14: 153–171. Praloran V, S Chevalier and H Gascan 1992 Blood 79: 2500–251.  
Mroczko B and Szmitkowski 2005 Clin Chem Lab Med 42(12): 1347–1354.  
Pampfer S, S Tabibzadeh, FC Chuan and JW Pollard 1992 Mol Endocrinol 5(12): 1931–1938.

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