

TECHNICAL DATA SHEET

Recombinant Human M-CSF

Catalog Number: 21-8789

RPx-Pro™ Recombinant Protein PRODUCT INFORMATION

CONTENTS

Recombinant Human M-CSF

DESCRIPTION

M-CSF, macrophage colony stimulating factor, is a hematopoietic growth factor important for driving differentiation, proliferation and maintenance of monocytes, macrophages, and other BM progenitor cells. M-CSF is produced by activated T cells and osteoclasts among other cell types. High levels of M-CSF in the pregnant uterus are associated with placenta formation and development. M-CSF activities include a variety of monocyte activities including enhanced phagocytic and chemotactic activity, and increased tumor cell cytotoxicity.

MOLECULAR MASS

Recombinant Human M-CSF is a 36.8 kDa homodimeric protein composed of two 159 amino acid polypeptide subunits

AMINO ACID SEQUENCE

MEEVSEYCSH MIGSGHLQSL QRLIDSQMET SCQITFEFVD QEQLKDPVCY LKKAFLLVQD IMEDTMRFRD NTPNAIAIVQ LQELSL-
RLKS CFTKDYEEHD KACVRTFYET PLQLLEKVKV FNETKNLLD KDOWNIFSKNC NNSFAECSSQ GHERQSEGS

SOURCE

E. Coli

PROTEIN CONTENT

Content Verified by UV Spectroscopy and/or SDS-PAGE gel.

PURITY

98 %

ENDOTOXIN LEVEL

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

AUTHENTICITY

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

CROSS REACTIVITY

Monkey, Mouse, Rat, Human

BIOACTIVITY

ED₅₀ determined by the dose-dependent stimulation of the proliferation of Mouse M-NSF-60 cells ≤ 1 ng/ml, corresponding to a specific activity of ≥ 1 x 10⁶ units/mg.

APPLICATIONS

Bioassay

RESEARCH AREAS

Cancer; Proliferation; Stem Cells & Differentiation

STORAGE

-20°C

RECONSTITUTION

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

REFERENCES

Stanley ER, KL Berg, DB Einstein, PS Lee, FJ Pixley, Y Wang, YG Yeung YG 1997 Mol. Reprod. Dev. 46 : 4–10 2. Nemunaitis J 1993 Crit. Rev. Oncol. Hematol. 14: 153–171 Praloran V, S Chevalier and H Gascan 1992 Blood 79: 2500–251 4. Mroczko B and Szmikowski 2005. Clin. Chem. Lab. Med. 42 (12): 1347–1354.

NOTE: Please choose the appropriate format for each application. Citations are provided as a convenience to you; please consult Materials and Methods sections for additional details about the use of any product in these publications.

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