M-CSF Rat E. coli

Product Data Sheet

Type: Recombinant
Source: E. coli
Species: Rat
Other names: Macrophage Colony Stimulating Factor, CSF-1, MGI-IM

Cat. No.:	
RBG30064002	(2 µg)
RBG30064010	(10 µg)
RBG30064100	(100 µg)

Description

M-CSF is a potent hematopoietic factor produced by a variety of cells, including lymphocytes, monocytes, fibroblasts, endothelial cells, myoblasts and osteoblasts. It is a key regulator of cellular proliferation, differentiation, and survival for blood monocytes, tissue macrophages, and their respective progenitor cells. M-CSF has been shown to play important roles in modulating dermal thickness and fertility. M-CSF is clinically used in the treatment of infection, malignancies and atherosclerosis. It facilitates hematopoietic recovery after bone marrow transplantation. Human M-CSF is reactive in murine systems, but the murine molecule exhibits no activity on human cells. Recombinant Rat M-CSF is a 36.2 kDa homodimeric protein consisting of two 155 amino acid polypeptide subunits.

Research topic

Oncology

Amino Acid Sequence

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MEVSEHCSHM IGNGHLQILQ QLIDSQMETA CLIEYKFVDQ EQLDDPVCYL KKAFVLVQVI IEETMRFKDN TPNANATERL
QELSMKLNSC FIKDYKEQNE ACVQTYKESP LRLLEKIKNF FNETKNFLEK DWNIFSKNCN DSLAKCSSRD VVTKP
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Source

E. coli

Purity

98%

Biological Activity

The ED_{50} was determined by the dose-dependent stimulation of the proliferation of murine M-NFS-60 cells is ? 5.0 ng/ml, corresponding to a specific activity of ? 2×10^5 units/mg.

Endotoxin

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

Reconstitution

Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at-20°C to -80°C.

Storage, Stability/Shelf Life

-20°C

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