

# PRODUCT DATA SHEET



Bioworld Technology, Inc.

## Recombinant M-CSF, Mouse

Catalog Number: BK0128-10µg

Source: Escherichia coli.

Quantity: 10µg

### 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.

### Molecular Weight:

30 kDa, observed by reducing SDS-PAGE.

### Purity:

> 95% as analyzed by SDS-PAGE.

### Biological Activity:

ED<sub>50</sub> < 3 ng/ml, measured in a cell proliferation assay using Murine M-NFS-60 cells, corresponding to a specific activity of > 3.3 × 10<sup>5</sup> units/mg.

### Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

### Formulation:

Lyophilized after extensive dialysis against 50mM Tris, 150mM NaCl, pH 8.0.

### AA Sequence:

MKEVSEHCSHMIGNHGLKVLQQLID-  
SQMETSCQIAFEFVDQEQLDDPVCYLKKAFL-  
FLVQDIIDETMRFKDNTPNANATERLQELS-  
NNLNSCFTKDYEEQNKACVRTFHET-  
PLQLLEKIKNFFNETKNLLEKDWNIFF-  
TKNCNNSFAKCSSRDVVTKP

### Endotoxin:

< 0.2 EU/µg, determined by LAL method.

### Reconstitution:

Reconstituted in ddH<sub>2</sub>O at 100 µg/ml.

### Storage:

Lyophilized recombinant Mouse Macrophage Colony Stimulating Factor (M-CSF) remains stable up to 6 months at -80 °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.

### Usage:

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