

# PRODUCT DATA SHEET



Bioworld Technology, Inc.

## Recombinant M-CSF, Rat

Catalog Number: BK0129-1mg

Source: Escherichia coli.

Quantity: 1mg

### Description:

Macrophage-Colony Stimulating Factor (M-CSF), also known as Colony Stimulating Factor-1 (CSF-1), can stimulate the survival, proliferation and differentiation of mononuclear phagocytes, in addition to the spreading and motility of macrophages. M-CSF is mainly produced by monocytes, macrophages, fibroblasts, and endothelial cells. Interaction of M-CSF with its receptor, c-fms, has been implicated in the growth, invasion, and metastasis of several types of cancer, including breast and endometrial cancer. Recombinant Rat Macrophage Colony Stimulating Factor (M-CSF) produced in E.coli is a disulfide-linked homodimer containing two non-glycosylated polypeptide chains of 155 amino acids each. A fully biologically active molecule, rrM-CSF has a molecular mass of 28 kDa analyzed by reducing SDS-PAGE and is obtained by chromatographic techniques at GenScript.

### Molecular Weight:

28 kDa, observed by reducing SDS-PAGE.

### Purity:

> 95% as analyzed by SDS-PAGE.

### Biological Activity:

ED50 < 5 ng/ml, measured in a cell proliferation assay using Murine M-NFS-60 cells, corresponding to a specific activity of > 2×10<sup>5</sup> units/mg.

### Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) pow-

der.

### Formulation:

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

### AA Sequence:

MEVSEHCSHMIGNHGLQILQQLIDSQMETA-  
CLIEYKFDVDEQLDDPVCYLKKAFLVQVII-  
EETMRFKDNTPNANATERLQELSMKLNCSF-  
IKDYKEQNEACVQTYKESPLRLLLEKIKNFFNETK  
NFLEKDOWNIFSKNCNDSLAKCSSRDVVTKP

### Endotoxin:

< 0.2 EU/μg, determined by LAL method.

### Reconstitution:

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

### Storage:

Lyophilized recombinant Rat Macrophage Colony Stimulating Factor (M-CSF) remains stable up to 6 months at -80 °C from date of receipt. Upon reconstitution, Rat M-CSF should be stable up to 1 week at 4 °C or up to 3 months at -20 °C.

### Usage:

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