

## Overview

<b>Synonyms</b>	Macrophage Colony Stimulating Factor, CSF-1, M-CSF
<b>Description</b>	<p><b>Macrophage-Colony Stimulating Factor (M-CSF)</b>, 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.</p> <p>Recombinant <b>Rat Macrophage Colony Stimulating Factor (M-CSF)</b> produced in <i>E.coli</i> 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.</p>
<b>Source</b>	<i>E. coli</i>
<b>Biological Activity</b>	ED <sub>50</sub> < 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.
<b>Sequence</b>	Glu <sup>33</sup> -Pro <sup>186</sup> (Accession #: NP_076471.3), with an N-terminal Met

## Properties

<b>Measured Molecular Weight</b>	28 kDa, observed by reducing SDS-PAGE.
<b>Purity</b>	> 95% as analyzed by SDS-PAGE.
<b>Formulation</b>	Lyophilized after extensive dialysis against 50mM Tris, 150mM NaCl, pH 8.0.
<b>Reconstitution</b>	Reconstituted in ddH <sub>2</sub> O at 100 µg/ml.
<b>Endotoxin Level</b>	< 0.2 EU/µg, determined by LAL method.
<b>Storage</b>	Lyophilized recombinant <b>Rat Macrophage Colony Stimulating Factor(M-CSF)</b> remains stable up to 6 months at lower than -70°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.
<b>Note</b>	For research use only

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