**Recombinant Human M-CSF**

**Catalog#** 300-25

**Source:** *E.coli*

**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 of blood monocytes, tissue macrophages and their progenitor cells. M-CSF has been shown to play important roles in modulating dermal thickness, and male and female fertility. M-CSF is clinically used in the treatment of infection, malignancies and atherosclerosis. It facilitates hematopoietic recovery after bone marrow transplantation. The human is reactive in murine systems, but the murine molecule exhibits no activity on human cells. Recombinant human M-CSF is a 36.8 kDa homodimeric protein containing two 159 amino acid polypeptide subunits.

**Synonyms:** Macrophage Colony Stimulating Factor, CSF-1, MGI-IM

**Sequence:**

```
MEEVSEYCSH MIGSGHLQSL QRLIDSQMET SCQITFEFVD QEQLKDPVCY LKKAFLVLQD IMEDTMRFRD NTPNAIAIVQ
LQELSRLKCS CFTKDYEEHD KACVRTFYET PLQLLEKVKN VFNETKNLLD KDWNIFSKNKC NNSFAECSSQ GHERQSEGS
```

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

**Purity:** ≥ 98% by SDS-PAGE gel and HPLC analyses.

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

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

**Biological activity:** Determined by its ability to stimulate the proliferation of murine M-NFS-60 cells. The expected ED$_{50}$ is ≤ 1.0 ng/ml, corresponding to a specific activity of ≥ 1 x 10$^6$ units/mg.

For a list of references please visit our website at www.peprotech.com

**Country of Origin:** USA

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**Storage/Stability:**

<table>
<thead>
<tr>
<th>Product Form</th>
<th>Temperature</th>
<th>Storage Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lyophilized</td>
<td>-20°C to -80°C</td>
<td>See expiration date</td>
</tr>
<tr>
<td>Lyophilized</td>
<td>4°C</td>
<td>6 months</td>
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<tr>
<td>Lyophilized</td>
<td>RT</td>
<td>1 month</td>
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<tr>
<td>Diluted as per CoA</td>
<td>-20°C to -80°C</td>
<td>12 months</td>
</tr>
<tr>
<td>Diluted as per CoA</td>
<td>2°C to 8°C</td>
<td>1 week</td>
</tr>
</tbody>
</table>

**Avoid repeated freeze-thaw cycles.**

Lot-specific information is not available on Product Information Sheet. See Certificate of Analysis for details.

**Usage:** For Research Use Only. Not for use in diagnostic or therapeutic procedures.