

## Product information

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# Recombinant Human Macrophage Colony Factor (rHu M-CSF)

**Catalog #:** RC213-20  
**Size:** 2µg / 10µg / 1000µg  
**Storage:** -20°C to -70 °C\*  
**Source:** *E. Coli*

\*: Product is shipped at ambient temperature. 12 months shelf life from date of receipt, if stored at -20°C to -70 °C; 3 months at -20°C to -70 °C under sterile conditions after reconstitution; 1 month at 2°C to 8 °C under sterile conditions after reconstitution. Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

## Product Description:

M-CSF, also known as CSF-1, is a four  $\alpha$  helical bundle cytokine that is the primary regulator of macrophage survival, proliferation and differentiation. M-CSF is also essential for the survival and proliferation of osteoclast progenitors. M-CSF also primes and enhances macrophage killing of tumor cells and microorganisms, regulates the release of cytokines and other inflammatory modulators from macrophages, and stimulates pinocytosis.

| Feature             | Description  |
|---------------------|--|
| Molecular Weight    | Approximately 36.8 kDa, a disulfide-linked homodimer consisting of two 158 amino acid polypeptidechains.   |
| Purity              | >95% by SDS-PAGE and HPLC analyses.  |
| Biological Activity | Fully biologically active when compared to standard. The ED50 as determined by a cell proliferation assay using murine M-NFS-60 cells is less than 1 ng/ml, corresponding to a specific activity of $> 1.0 \times 10^6$ IU/mg. |
| Physical Appearance | Sterile Filtered White lyophilized (freeze-dried) powder.  |
| Formulation         | Lyophilized from a 0.2µm filtered solution in PBS, pH7.4.  |
| AA Sequence         | EEVSEYCSHM IGSGHLQSLQ RLIDSQMETS CQITFEFVDQ EQLKDPVCYL KKAFLLVQDI<br>MEDTMRFRDN TPNAIAIVQL QELSLRLKSC FTKDYEEHDK ACVRTFYETP LQLLEKVKNV<br>FNETKNLLDK DWNIFSKNCN NSFAECSSQG HERQSEGS  |
| Endotoxin           | Less than 1 EU/µg of rHuM-CSF as determined by LAL method.   |

## Reconstitution:

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water to a concentration of 0.1 mg/mL. Stock solutions should be apportioned into working aliquots and stored at  $\leq -20^\circ\text{C}$ . Further dilutions should be made in appropriate buffered solutions.



PRODUCTS ARE INTENDED FOR BASIC SCIENTIFIC RESEARCH ONLY.  
NOT INTENDED FOR HUMAN OR ANIMAL USE.