

# Recombinant Mouse Macrophage Colony Stimulating Factor (rm M-CSF)

**Synonyms:** CSF-1, Lanimostim

**Introduction:** Granulocyte/ Macrophage Colony- Stimulating Factors are cytokines that act in hematopoiesis by controlling the production, differentiation and function of 2 related white cell population of the blood, the granulocytes and the monocytes- macrophages. M-CSF induces cells of the monocyte/ macrophage lineage. It plays a role in immunological defenses, bone metabolism, lipoproteins clearance, fertility and pregnancy.

**Description:** Recombinant mouse M-CSF produced in *E.Coli* is a disulfide linked homodimer, non-glycosylated, polypeptide chain containing 2 x 156 amino acids and having a molecular mass of 36.4 kDa. The rm M-CSF is purified by proprietary chromatographic techniques.

**Source:** *Escherichia Coli*.

**Physical Appearance:** Sterile filtered white lyophilized (freeze-dried) powder.

**Formulation:** lyophilized from a 0.22 µm filtered solution in 25 mM Sodiumphosphate, 200 mM NaCl, pH 7.5  
The aliquots of 1µg and 2µg contain Trehalose 5% (w/vol) for better recovery

**Solubility:** It is recommended to reconstitute the lyophilized rm M-CSF in sterile H<sub>2</sub>O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

**Stability:** Lyophilized rm M-CSF although stable at room temperature for 3 weeks, should be stored desiccated below -18° C. Upon reconstitution rm M-CSF should be stored at 4° C between 2-7 days and for future use below -18° C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

**Purity:** 95.0% as determined by SDS-PAGE.

**Amino Acid Sequence:** MKEVSEHC SHMIGNHGLKVL QQLIDSQMETSCQIAFEFVD QEQLDDPVCYLKKAFFLVQD  
IIDETMRFKDNTNPANATER LQELSNLNSCFTKDYEEQN KACVRTFHETPLQLLEKIKN FFNETKNLLEKDWNIPTKNC  
NNSFAKCSSRDVVTKP

**Endotoxicity:** The endotoxin level is less than 1 EU / µg determined by LAL method.

**Biological Activity:** The ED<sub>50</sub> tested by receptor driven reporter gene expression in Ba/F3 c-fms transfectants was found < 1 ng/ml, corresponding to a specific activity of 1 x 10<sup>6</sup> IU/mg.

This material is offered for **research use only**. Not for use in human. For in vitro use only. ImmunoTools will not be held responsible for patent infringement or other violations that may occur with the use of our products.

<i>small</i>	2 µg	Cat.N°	12343112
<i>medium</i>	10 µg	Cat.N°	12343113
<i>large</i>	50 µg	Cat.N°	12343115
<i>x-large</i>	250 µg	Cat.N°	12343117
<i>xx-large</i>	1000 µg	Cat.N°	12343118

**ImmunoTools** Excellent Quality - Advantageously priced

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