



## Macrophage Colony-Stimulating Factor 1 (M-CSF) Human, His Tag, Sf9 Insect Cells Recombinant Protein

### Product Data Sheet

Cat. No.:	A31015002	A31015010	A31015100
Size:	2 µg	10 µg	100 µg

#### Description:

Macrophage Colony-Stimulating Factor 1 (M-CSF) Human, His Tag, Sf9 Insect Cells Recombinant Protein is a single, glycosylated polypeptide chain containing 231 amino acids (33-255 a.a.) and has a molecular mass of 26.1 kDa (molecular size on SDS-PAGE will appear at approximately 28-40 kDa). The M-CSF is expressed with an 8 amino acid His tag at C-Terminus and is purified by proprietary chromatographic techniques.

#### Summary:

Macrophage colony-stimulating factor (M-CSF) is a cytokine that plays an essential role in the regulation of survival, proliferation and differentiation of hematopoietic precursor cells, especially mononuclear phagocytes, such as macrophages and monocytes. Promotes the release of proinflammatory chemokines, and thereby plays an important role in innate immunity and in inflammatory processes. Plays an important role in the regulation of osteoclast proliferation and differentiation, the regulation of bone resorption, and is required for normal bone development. Required for normal male and female fertility. Promotes reorganization of the actin cytoskeleton, regulates formation of membrane ruffles, cell adhesion and cell migration. Plays a role in lipoprotein clearance. [Reference: [UniProtKB - A0A024R0A1 \(CSF1\\_HUMAN\)](#)].

#### Amino Acid Sequence:

EEVSEYCSHM IGSGHLQSLQ RLIDSQMETS CQITFEFVDQ EQLKDPVCYL KKAFLLVQDI MEDTMRFRDN  
TPNAIAIVQL QELSLRLKSC FTKDYEEHDK ACVRTFYETP LQLEKVKNV FNETKNLLDK DWNIFSKNCN  
NSFAECSSQD VVTKPDCNCL YPKAIPSSDP ASVSPHQPLA PSMAPVAGLT WEDSEGTEGS SLLPGEQPLH  
TVDPGSAKQR PPRLEHHHHH H.

#### Other Names:

Bioactive Human M-CSF, CSF-1, CSF1 gene product, MCSF

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#### Ilex Life Sciences LLC

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**Source:**

Sf9 (*Spodoptera frugiperda*) insect cells.

**Purity:**

Greater than 95.0% as determined by SDS-PAGE.

**Physical Appearance:**

Sterile Filtered colorless solution.

**Formulation:**

The M-CSF solution protein solution (0.25 mg/ml) contains Phosphate Buffered Saline (pH 7.4) and 10% glycerol.

**Biological Activity:**

Bioactivity is determined in a cell proliferation assay using M-NFS-60 mouse myelogenous leukemia lymphoblast cell. The ED<sub>50</sub> for this effect is less or equal to 3 ng/ml.

**Shipping:**

Shipped on regular ice packs. Upon receipt, store the product at the temperature recommended below.

**Stability:**

Store at 4° C if entire vial will be used within 2-4 weeks. For longer periods of time, store frozen at -20° C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). **Avoid multiple freeze-thaw cycles.**

**Usage:**

Ilex Life Sciences products are furnished for LABORATORY RESEARCH USE ONLY. The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals.

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