



Macrophage Colony-Stimulating Factor 1 (M-CSF) Human, Baculovirus Recombinant Protein

Product Data Sheet

Cat. No.:	A3637002	A3637010	A36371MG
Size:	2 µg	10 µg	1 mg

Description:

Macrophage Colony-Stimulating Factor 1 (M-CSF) Human, Baculovirus Recombinant Protein is a disulfide linked homodimer, glycosylated, polypeptide chain containing 2 x 149 amino acids and has a total molecular mass of 42 kDa. The M-CSF 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
NSFAECSSQ.

Other Names:

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

Source:

Baculovirus infected Silkworm.

update.: 092021

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**Purity:**

Greater than 95.0% as determined by analysis by RP-HPLC and SDS-PAGE.

Physical Appearance:

Sterile filtered white lyophilized (freeze-dried) powder.

Formulation:

The lyophilized protein (1 mg/ml) was lyophilized with 20mM phosphate buffer, 1% HSA and 3% mannitol.

Reconstitution:

It is recommended to reconstitute the lyophilized M-CSF in sterile 18M Ω -cm H₂O not less than 100 μ g/ml, which can then be further diluted to other aqueous solutions.

Biological Activity:

The ED₅₀, calculated by the dose-dependent stimulation of the proliferation of murine M-NFS-60 indicator cells was found < 3 ng/ml, corresponding to a specific activity of less than 333,333.33 units/mg.

Shipping:

At ambient temperature. Upon receipt, store the product at the temperature recommended below.

Stability:

Lyophilized M-CSF, although stable at room temperature for 3 weeks, should be stored desiccated below -18° C. Upon reconstitution, M-CSF should be stored at 4° C between 2-7 days and for future use below -18° C. Please prevent 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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