

CHAMOT

**重组人巨噬细胞集落刺激因子 /Recombinant M-CSF,
Human, Animal-Free**

CM116-5HP

CM116-20HP

CM116-100HP

CM116-500HP

CM116-1000HP



CHAMOT

乔默®生物

Specialize In Cytokines

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重组人巨噬细胞集落刺激因子 /Recombinant M-CSF, Human, Animal-Free

产品编号	CM116-5HP	CM116-20HP	CM116-100HP	CM116-500HP	CM116-1000HP
规格	5 µg	20 µg	100 µg	500 µg	1 mg

产品简介

背景描述

Macrophage Colony Stimulating Factor (M-CSF) is a 18.54 kDa member of hematopoietic Growth Factors with 159 amino acid residues. M-CSF produced by osteoblasts and osteoblast precursors. M-CSF stimulates the growth and differentiation of the monocyte lineage, and promotes the survival, proliferation, and functions of mature monocytes/macrophages.

别称

macrophage colony stimulating factor, CSF-1, MGI-IM, CSF1

蛋白编码

P09603

分子量

The protein has a calculated MW of 13.34 kDa. The protein migrates as 13-26 kDa under reducing condition (SDS-PAGE analysis).

表达系统

Escherichia coli

纯度

>98% as determined by SDS-PAGE.

生物活性

Measure by its ability to induce proliferation in NFS-60 cells. The ED₅₀ for this effect is <1 ng/mL. The specific activity of recombinant human M-CSF is approximately >2.5x 10⁸ IU/mg.

内毒素检测

<0.1 EU per 1 µg of the protein by the LAL method.

蛋白序列

MEEVSEYCSHMIGSGHLQSLRLIDSQMETSCQITFEFVDQEQLKDPVCYLKKAFLLVQDIME
DTMRFRDNTPNIAIAIVQLQELSLRLKSCFTKDYEEDKACVRTFYETPLQLLEKVKNVFNETKN
LLDKDWNIFSKNCNNSFAECSSQGHERQSEGS with polyhistidine tag at the C-terminus.

产品形式

The protein was lyophilized from a 0.2 µm filtered solution containing 1X PBS, pH 7.4. If you have any concerns or special requirements, please confirm with us.

产品应用

Cell Culture

产品使用

1. Before opening, centrifuge at 3000 rpm for 5 mins.

2. Initial Reconstitution

- Reconstitute the Lyophilized Protein in sterile H₂O to a concentration of 100-200 µg/mL.
- Then, incubate it at room temperature for at least 20 mins to ensure sufficient dissolution.

Do Not Vortex! Vigorous shaking may impair the biological activity of the protein.

- Store at 2°C to 8°C for up to 1 week.

3. Extended Storage

- After the initial reconstitution, further dilute the reconstituted protein in a buffer containing a carrier protein or stabilizer (e.g., 0.1% BSA, 10% FBS, 5% HSA, or 5% trehalose solution). The final concentration is not less than 10 µg/ml.

- Prepare aliquots (≥20 µl).
- Store at -20°C or -80°C for 3 to 6 months.

Avoid repeated freeze-thaw cycles.

产品储存/运输

Lyophilized Protein: Store at -20°C for 1 year.

储存

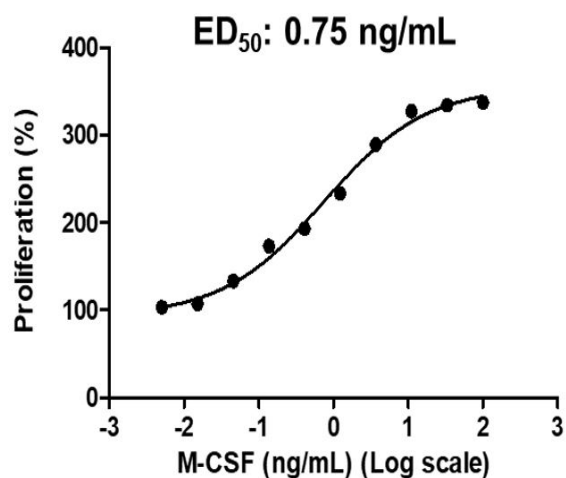
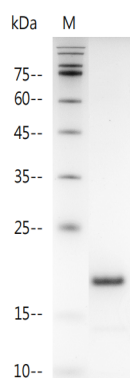
Initial Reconstitution: Store at 2°C to 8°C for up to 1 week.

Extended Storage: Store at -20°C or -80°C for 3 to 6 months with a carrier protein or stabilizer.

运输

Blue Ice

实验数据展示



SDS-PAGE analysis of recombinant human M-CSF

Human M-CSF, His Tag, E. coli induced NFS-60 cell proliferation,
with the ED_{50} at 0.75 ng/mL.

文献引用

- Decoding the spatial chromatin organization and dynamic epigenetic landscapes of macrophage cells during differentiation and immune activation. Nat Commun. 2022 Oct 4;13(1):5857. (IF 14.919) (Human M-CSF)
- Spleen Tyrosine Kinase Exacerbates Anti-Citrullinated Protein/Peptide Antibody-Mediated Osteoclast Bone Resorption via Promotion of Vav3 Phosphorylation. Cell Biol Int. 2025 Aug 11. (IF 3.1) (Human/Mouse M-CSF, RANKL)

For Research Use or Further Manufacturing Only

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