

Recombinant Mouse M-CSF, Tag Free

■基本信息

tein, Mouse; Csfm Protein, Mouse; MCSF Protein, Mouse; op Protein, Mouse.
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自于小鼠CTLL-2细胞的剂量依赖性实验:
1 ng/mL
> 1x10 ⁷ units/mg.

■组分和存储

产品形式	该蛋白以溶解于 PBS 缓冲液的形式提供。
存储说明	此产品可稳定存在于如下条件中: • 4°C 保存一周; • -20°C 保存 3 个月。 • 请避免多次反复冻融。

■质量控制

纯度	≥ 95%,数据来自于 SDS-PAGE 和 HPLC 检测。
内毒素水平	< 0.1 ng/µg
详细 QC 信息请参阅 CoA。	

▮背景介绍

Macrophage colony-stimulating factor 1, also known as CSF-1, M-CSF, Lanimostim and CSF1, is a single-pass membrane protein which is disulfide-linked as a homodimer or heterodimer. Granulocyte / macrophage colony-stimulating factors are cytokines that act in hematopoiesis by controlling the production, differentiation, and function of 2 related white cell populations of the blood, the granulocytes and the monocytes-macrophages.

M-CSF/CSF-1 is known to facilitate monocyte survival, monocyte-to-macrophage conversion, and macrophage proliferation. M-CSF/CSF-1 is a secreted cytokine which influences hemopoietic stem cells to differentiate into macrophages or other related cell types. It binds to the Colony stimulating factor 1 receptor. M- CSF/CSF-1 may also be involved in development of the placenta. The active form of M-CSF/CSF-1 is found extracellularly as a disulfide-linked homodimer, and is thought to be produced by proteolytic cleavage of membrane-bound precursors. M-CSF/CSF-1 induces cells of the monocyte/macrophage lineage. It also plays a role in immunological defenses, bone metabolism, lipoproteins clearance, fertility and pregnancy. Upregulation of M-CSF/CSF-1 in the infarcted myocardium may have an active role in healing not only through its effects on cells of monocyte/macrophage lineage, but also by regulating endothelial cell chemokine expression.

■参考文献

- Pandit J, Bohm A, Jancarik J, Halenbeck R, Koths K, Kim SH. Three-dimensional structure of dimeric human recombinant macrophage colony-stimulating factor. Science. 1992 Nov 20;258(5086):1358-62. doi: 10.1126/science.1455231. PMID: 1455231.
- Tokai M, Kawasaki H, Kikuchi Y, Ouchi K. Cloning and characterization of the CSF1 gene of Saccharomyces cerevisiae, which is required for nutrient uptake at low temperature. J Bacteriol. 2000 May;182(10):2865-8. doi: 10.1128/jb.182.10.2865-2868.2000. PMID: 10781556; PMCID: PMC101996.
- 3. Fan X, Fan D, Gewant H, Royce CL, Nanes MS, Rubin J. Increasing membrane-bound MCSF does not enhance OPGL-driven osteoclastogenesis from marrow cells. Am J Physiol Endocrinol Metab. 2001 Jan;280(1):E103-11. doi: 10.1152/ajpendo.2001.280.1.E103. PMID: 11120664.

