

M-CSF/CSF-1/MGI-IM, Human, Recombinant

Cat. No. : PCK042

General Information

Synonyms	CSF-1;MGI-IM
Species	Human
Expression host	E.coli
Sequence	MEEVSEYCSHMIGSGHLQSLRLIDSQMETSCQITFEFVDQEQLKDPVCYLKKAFLLVQDIMED TMRFRDNTPNIAIVQLQELSLRLKSCFTKDYEEDKACVRTFYETPLQLLEKVKNVFNETKNLL DKDWNIFSKNCNNSFAECSSQGHERQSEGS with polyhistidine tag at the C-terminus.
Accession	P09603.2
Tag	His-tag at the C-terminus
Mol mass	13.34 kDa
Expiration date	12 months
Bio activity	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 > 2.5 × 10 ⁸ IU/mg.

Product feature

Purity	> 98% as determined by SDS-PAGE. Ni-NTA chromatography
Endotoxin (EU/μg)	< 0.1
Storage	Lyophilized protein should be stored at -5~-20°C for 1 year. Upon reconstitution, store at 2-8°C for up to 1 week. Further dilute in a buffer containing a carrier protein or stabilizer (e.g. 0.1% BSA, 10% FBS, 5% HSA or 5% trehalose solution), protein aliquots should be stored at -5~-20°C or -80°C for 3-6 months.
Shipping	Ice bag
Formulation	The protein was lyophilized from a 0.2 μm filtered solution containing 1 × PBS, pH 7.4.
Reconstitution	It is recommended to reconstitute the lyophilized protein in sterile water to a concentration not less than 100 μg/mL. Do Not Vortex! Vigorous shaking may impair the biological activity of the protein.

Background

Macrophage Colony-Stimulating Factor (M-CSF), is a secreted cytokine which causes hematopoietic stem cells to differentiate into macrophages or other related cell types. 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.

SDS-PAGE

