

**BACKGROUND:**

Macrophage colony stimulating factor (M-CSF) is a hematopoietic growth factor that is widely produced by a variety of cells. M-CSF stimulates the proliferation and differentiation of hematopoietic stem cells into monocyte and macrophage cell types. M-CSF also acts through the colony stimulating factor 1 receptor (CSF1R) to modulate processes involved in immunology, bone metabolism, fertility, and pregnancy.

Recombinant Rat Macrophage-Colony Stimulating Factor is a non-glycosylated protein dimer, containing 155/210 amino acids and having a molecular mass of 18.1/36.2 kDa.

**Cat. No.:**  
RP3033AF

**Alternate Names:**  
MGI-IM, CSF-1

**AA Sequence:**

MEVSEHCSHM	IGNGHLQILQ	QLIDSQMETA
CLIEYKFVDQ	EQLDDPVCYL	KKAFVLVQVI
IEETMRFKDN	TPNANATERL	QELSMKLNSC
FIKDYKEQNE	ACVQTYKESP	LRLLKIKNF
FNETKNFLEK	DWNIFSKNCN	DSLAKCSSRD
VVTKP		

**TECHNICAL INFO**

**Source:**  
*E. coli*

**Physical Appearance:**

Sterile Filtered white lyophilized (freeze-dried) powder.

**Formulation:**

10 mM sodium phosphate, pH 7.5

**Stability:**

Lyophilized product is very stable at -20°C. Reconstituted material should be aliquoted and frozen at -20°C. It is recommended that a carrier protein (0.1% HSA or BSA) is added for long term storage.

**Reconstitution:**

Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at 0.1 mg/mL, which can be further diluted into other aqueous solutions.

**Protein Content and Purity determined by:**

- UV spectroscopy at 280 nm.
- RP-HPLC calibrated against a known standard.
- Quantitation against a known standard via reducing and non-reducing SDS-PAGE gels.

**Endotoxin Level:**

Endotoxin level, as measured by LAL analysis, is <0.01ng/ug or <0.1EU/ug.

**Animal Component-Free**

This product is produced with no animal derived raw products. All processing and handling employs animal free equipment and animal free protocols.

