

# Recombinant Murine Macrophage Colony Stimulating Factor

Catalog No: #AP60176

Orders: [order@signalwayantibody.com](mailto:order@signalwayantibody.com)

Package Size: #AP60176-1 10ug #AP60176-2 100ug #AP60176-3 500ug

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## Description

Product Name	Recombinant Murine Macrophage Colony Stimulating Factor
Host Species	Escherichia coli.
Purification	> 95 % by SDS-PAGE and HPLC analyses.
Other Names	CSF-1, MGI-IM
Uniprot	Q3U4F9
Calculated MW	Approximately 52.0 kDa, a disulfide-linked homodimer consisting of two 230 amino acid polypeptide chains.
Target Sequence	KEVSEHCSTM IGNGLKVLQ QLIDSMETS CQIAFEFVDQ EQLDDPVCYL KKAFFLVQDI IDETMRFKDN TPNANATERL QELSNLNSC FTKDYEEQNK ACVRTFHETP LQLEKIKNF FNETKNLLEK DWNIFTKNCN NSFAKCSSRD VVTKPDCNCL YPKATPSSDP ASASPHQPPA PSMAPLAGLA WDDSQRTEGS SLLPSELPLR IEDPGSAKQR PPRSTCQTLE
Formulation	Lyophilized from a 0.2 µm filtered solution in 20 mM Tris, 500 mM NaCl, pH 7.4.
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.- 12 months from date of receipt, -20 to -70 °C as supplied.- 1 month, 2 to 8 °C under sterile conditions after reconstitution.- 3 months, -20 to -70 °C under sterile conditions after reconstitution.

## Background

Macrophage Colony Stimulating Factor (M-CSF), also named CSF-1, is a hematopoietic growth factor that is involved in the proliferation, differentiation, and survival of monocytes, macrophages, and bone marrow progenitor cells. It is produced by osteoblasts (as a result of endocrine stimulation by parathyroid hormone) exerts paracrine effects on osteoclasts and can interact with CSF1R. M-CSF is a four  $\alpha$ -helical bundle cytokine and its active form is found extracellularly as a disulfide-linked homodimer. Four transcript variants encoding three different isoforms have been reported for M-CSF gene. Although forms may vary, all of them contain the N-terminal 150 a.a. portion that is necessary and sufficient for interaction with the receptor. The first 229 a.a. of mature mouse M-CSF shares 87 %, 83 %, 82 % and 81 % sequence identity with corresponding regions of rat, dog, cow and human M-CSF, respectively. Human M-CSF is active in the mouse, but mouse M-CSF is reported to be species-specific.

Note: This product is for in vitro research use only