

## DATA SHEET

## **Product Information**

Product Name	:	Recombinant Human Macrophage-Colony Stimulating
		Factor (rhM-CSF)
Synonyms	:	Macrophage-colony-stimulating factor 1, MCSF, CSF1
Description	:	Recombinant human M-CSF produced in <i>E. coli</i> is a non-glycosylated 37kDa homodimeric protein containing 159 amino acids polypeptide subunit. M-CSF, also known as CSF-1, is the primary regulator of the survival, proliferation, differentiation and function of mononuclear phagocytes. M-CSF plays important roles in innate immunity, cancer and inflammatory diseases, including systemic lupus erythematosus, arthritis, atherosclerosis and obesity. M-CSF binds to the tyrosine kinase receptor CSF-1 receptor on myeloid progenitor cells, which results in their differentiation into several cell types belonging to the mononuclear phagocyte lineage.
NCBI Accession No.	:	NM_172211.3
Amino acid sequence	:	MEEVSEYCSHMIGSGHLQSLQRLIDSQMETSCQITFEFVDQEQLKDPVCYLK KAFLLVQDIMEDTMRFRDNTPNAIAIVQLQELSLRLKSCFTKDYEEHDKACV RTFYETPLQLLEKVKNVFNETKNLLDKDWNIFSKNCNNSFAECSSQGHERQS EGS
Molecular Mass	:	18.5 kDa (159 aa)
Protein Tags	:	No tagging
Source	:	E. coli.
Cat. No.	:	HMCS-10, HMCS-25, HMCS-50, HMCS-100, HMCS-250, HMCS-500
Storage	:	Should be at $\leq$ -70 °C as undiluted aliquots of handy size. Avoid repeated freezing and thawing.
Cross Reactivity	:	Monkey, Mouse, Rat

## **Quality Control**

Test items	Specifications
Appearance	: Clear, colorless liquid
Purity	: Greater than 98 % by RP-HPLC and SDS-PAGE
Specificity	: Using Western blot, detection
Concentration	: 0.1 mg/ml, Bradford method
Biological Activity	Determined by proliferation of M-NFS- 60 indicator cells : The ED50 is <1.0 ng/ml, corresponding to a specific activity of > $1.0 \times 10^6$ EU/mg
Endotoxin	: Less than 1.0 EU/µg as determined by the LAL method
Formulation	: PBS (pH 7.0~8.0) without preservative or carrier proteins
Stability	: Stable for up to 12 months at -70 °C. Stable for a month at 4 °C.
Sterility	Sterilized through a 0.2 μm membrane filter and packaged aseptically. Culture for 2 weeks, no growth

Manufacturer

: JW CreaGene Inc.

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