

## Recombinant Human Macrophage Colony Stimulating Factor (M-CSF, CSF-1)

Publication Part Number MAN0004532

**Rev.** 1.00

Catalog Number:	PHC9504	PHC9501
Quantity:	10 μg	100 µg
Lot Number:	See product label.	
Molecular Weight:	38 kDa homodimer	
Purity:	≥95% as determined by SDS–PAGE analysis.	
Biological Activity:	$ED_{50}$ range $\leq 5$ ng/mL, determined by the dose dependent proliferation of M–NSF60 cells. The optimal concentration for each specific application should be determined by an initial dose-response assay.	
Formulation:	Lyophilized, carrier free.	
Sterility:	Filtered prior to lyophilization through a 0.22 micron sterile filter.	
Endotoxin:	<0.1 ng/µg	
Production:	Recombinant human M-CSF is produced in HEK 293 cells and purified via sequential chromatography.	
Reconstitution Recommendation:	Lyophilized human M–CSF should be reconstituted in 20mM Tris–HCl, pH 8.0 to a concentration of $0.1-1.0$ mg/mL. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein, such as $0.1\%$ BSA and store in working aliquots at $-20^{\circ}$ C to $-80^{\circ}$ C.	
Suggested Working Dilutions:	The optimal concentration should be determined for each specific application.	
Storage:	Lyophilized human M–CSF should be stored at $2^{\circ}$ C to $8^{\circ}$ C, preferably desiccated. Store reconstituted human M–CSF at $\leq -20^{\circ}$ C (not in a frost–free freezer). Keep freeze–thaw cycles to a minimum.	
<b>Expiration Date:</b>	Expires one year from date of receipt when stored as instructed.	
References:	Chitu, V., E.R. Stanley (2006) Colony–stimulating factor–1 i 18(1):39–48.	n immunity and inflammation. Curr Opin Immunol
	Mroczko, B., M. Szmitkowski (2004) Hematopoietic cytokir 54.	nes as tumor markers. Clin Chem Lab Med 42(12): 1347–
	Sweet, M.J., D.A. Hume (2003) CSF-1 as a regulator of macr Immunol Ther Exp (Warsz) 51(3):169–77.	rophage activation and immune responses. Arch

## **Explanation of Symbols**

The symbols present on the product label are explained below:

Symbol	Description
REF	Catalog Number
RUO	Research Use Only
	Use by
***	Manufacturer
[-]	Without, does not contain
from Light	Protect from light
<u> </u>	Directs the user to consult instructions for use (IFU), accompanying the product.

Symbol	Description	
LOT	Batch code	
IVD	In vitro diagnostic medical device	
1	Temperature limitation	
EC REP	European Community authorized representative	
[+]	With, contains	
<u> </u>	Consult accompanying documents	

## Limited Use Label License: Research Use Only

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For Research Use Only. Caution: Not for human or animal therapeutic or diagnostic use.

Manufactured under ISO 13485 Quality Standard

 $Manufacturing\ site:\ 7335\ Executive\ Way\ |\ Frederick,\ MD\ 21704\ |\ Toll\ Free\ in\ USA\ 800.955.6288$ 

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