

Recombinant Human Monocyte Chemotactic and Activating Factor (MCAF)/(MCP-1)

Catalog Number PHC1014 (10 μg), PHC1015 (25 μg), PHC1011 (100 μg)

Pub. No. MAN0004466 Rev. 2.0

Product specifications

Lot number	See product label.				
Molecular weight	8 kDa				
Purity	>98% as determined by SDS PAGE analysis.				
Biological activity	ED_{50} <10 ng/mL, determined by measuring dose dependent chemotaxis with human THP-1 cells. Determine the optimal concentration for each specific application using an initial dose response assay.				
Formulation	Lyophilized, carrier free.				
Sterility	Filtered before lyophilization through a 0.22 micron sterile filter.				
Endotoxin	<0.1 ng/µg				
Production	Produced in <i>E. coli</i> and purified by sequential chromatography.				
Reconstitution recommendation	Centrifuge the vial briefly, before opening to bring the contents to the bottom. Reconstitute the lyophilized protein in sterile, distilled water to $0.1-0.5$ mg/mL. Apportion the reconstituted protein into working aliquots and store at ≤ -20 °C. Make any further dilutions of the reconstituted protein in medium or buffered solution containing carrier protein, such as PBS with 0.1% BSA.				
Suggested working dilutions	The optimal concentration should be determined for each specific application.				
Storage	Store the lyophilized protein at 2–8°C, preferably desiccated. Upon reconstitution, apportion into working aliquots and store at \leq -20°C (not in a frost-free freezer). Avoid repeated freeze-thaw cycles.				
Expiration date	Expires one year from date of receipt when stored as instructed.				
References	Yoshimura, T, Yuhki, N, Moore, SK, Appella, E, Lerman, MI, and Leonard, EJ. (1989) Human monocyte chemoattractant protein-1 (MCP-1). Full-length cDNA cloning, expression in mitogen-stimulated blood mononuclea leukocytes, and sequence similarity to mouse competence gene JE. FEBS Lett 244:487-93.				
	Cross, AK, Richardson, V, AH, SA, Palmer, I, Taub, DD, and Rees, RC. (1997) Migration responses of human monocytic cell lines to alpha- and beta-chemokines. Cytokine 9:521-8.				
	Rollins, BJ, Walz, A, and Baggiolini, M. (1991) Recombinant human MCP-I/JE induces chemotaxis, calcium flux, and the respiratory burst in human monocytes. Blood 78:1112-6.				
	Rodriguez-Frade, JM, Vila-Coro, AJ, Martin de Ana, A, Albar, JP, Martinez, C, and Mellado, M. (1999) The chemokine monocyte chemoattractant protein-1 induces functional responses through dimerization of its receptor CCR2. Proc. Nat'l. Acad. Sci. USA 96:3628-33.				
	Cambien, B, Pomeranz, M, Millet, MA, Rossi, B, and Schmid-Alliana, A. (2001) Signal transduction involved in MCP-1-mediated monocytic transendothelial migration. Blood 97:359-66.				

Limited product warranty

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Explanation of Symbols

Symbol	Description	Symbol	Description	Symbol	Description
	Manufacturer	REF	Catalog number	LOT	Batch code
	Use by	1	Temperature limitation		
[i]	Consult instructions for use	\triangle	Caution, consult accompanying documents		

Manufacturer's address: Life Technologies Corporation | 5781 Van Allen Way | Carlsbad, CA 92008

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