

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

Publication Part Number MAN0004466

**Rev.** 1.00

| Catalog Number:                   | PHC1014  | PHC1015 | PHC1011 |
|-----------------------------------|--|---------|---------|
| Quantity:                         | 10 μg  | 25 μg   | 100 µg  |
| Lot Number:                       | See product label.   |         |         |
| Molecular Weight:                 | 8 kDa  |         |         |
| Purity:                           | ≥98% pure by SDS-PAGE  |         |         |
| Biological Activity:              | $ED_{50} = <10 \text{ ng/mL}$ . The biological activity was determined by measuring dose dependent chemotaxis with human THP-1 cells.  |         |         |
| Formulation:                      | Lyophilized, carrier-free.   |         |         |
| Sterility:                        | Filtered prior to lyophilization through a 0.22 micron sterile filter.   |         |         |
| Endotoxin:                        | <0.1 ng/μg   |         |         |
| Production:                       | Produced in E. coli and purified by sequential chromatography.   |         |         |
| Reconstitution<br>Recommendation: | We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute lyophilized human MCAF (MCP-1) in sterile, distilled water to $0.1$ – $0.5$ mg/mL. These stock solutions should be apportioned into working aliquots and stored at $\leq$ – $20^{\circ}$ C. Further dilution should be made in medium or buffered solution containing carrier protein, such as PBS with $0.1\%$ BSA.   |         |         |
| Suggested<br>Working Dilutions:   | The optimal concentration should be determined for each specific application.  |         |         |
| Storage:                          | Lyophilized human MCAF (MCP-1) should be stored at 2°C to 8°C, preferably desiccated. Store reconstituted human MCAF (MCP-1) at $\leq -20$ °C (not in a frost-free freezer). Keep freeze-thaw cycles to a minimum.   |         |         |
| Expiration Date:                  | Expires one year from date of receipt when stored as instructed.   |         |         |
| References:                       | <ul> <li>Yoshimura, T., N. Yuhki, S.K. Moore, E. Appella, M.I. Lerman, and E.J. Leonard (1989) Human monocyte chemoattractant protein-1 (MCP-1). Full-length cDNA cloning, expression in mitogen-stimulated blood mononuclear leukocytes, and sequence similarity to mouse competence gene JE. FEBS Lett 244:487–93.</li> <li>Cross, A.K., V. Richardson, S.A. AH, I. Palmer, D.D. Taub, and R.C. Rees (1997) Migration responses of human monocytic cell lines to alpha- and beta-chemokines. Cytokine 9:521–8.</li> <li>Rollins, B.J., A. Walz, and M. Baggiolini (1991) Recombinant human MCP-1/JE induces chemotaxis, calcium flux, and the respiratory burst in human monocytes. Blood 78:1112–6.</li> <li>Rodriguez-Frade, J.M., A.J. Vila-Coro, A. Martin de Ana, J.P. Albar, C. Martinez, (Continued): and M. Mellado (1999) The chemokine monocyte chemoattractant protein-1 induces functional responses through dimerization of its receptor CCR2. Proc. Nat'I. Acad. Sci. USA 96:3628–33.</li> <li>Cambien, B. M. Pomeranz, M.A. Millet, B. Rossi, and A. Schmid-Alliana (2001) Signal transduction involved in MCP-1-mediated monocytic transendothelial migration. Blood 97:359–66.</li> </ul> |         |         |

## **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        |  |
| Directs the user to consult instructions for use (IFI 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                 |  |
| À   | Consult accompanying documents     |  |

## Limited Use Label License: Research Use Only

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