### Product Name: Biotin-CCL2 (MCP-1)

<table>
<thead>
<tr>
<th>Catalog Numbers:</th>
<th>B-CCL2-2ug</th>
<th>B-CCL2-10ug</th>
<th>B-CCL2-50ug</th>
<th>B-CCL2-100ug</th>
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</thead>
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### DESCRIPTION

- **Source**: E. coli derived Accession # P13500 (24-99)
- **Modification**: Biotinylated
- **Predicted Molecular Mass**: 11,084.72 Da
- **Extinction Coefficient**: 14,180 M-1 cm-1

### SPECIFICATIONS

- **Activity**: EC50 = 1.26nM determined by Migration Assay of THP-1 cells
- **Actual Molecular Mass (Mass Spec)**: 11,085.9 Da by ESI MS
- **Endotoxin Level**: <0.01 EU per 1µg of the protein by the LAL method
- **Purity**: > 97% by HPLC
- **Formulations**: Lyophilized
- **Carrier Protein**: None

### PREPARATION AND STORAGE

- **Reconstitution**: Spin tube prior to resuspending. Recommended at 100µg/mL in sterile water
- **Shipping**: Room Temp
  - **Avoid repeated freeze-thaw cycles**
  - 12 months from date of receipt, -20 to -70 °C as supplied.
  - Suggest to use immediately after reconstitution
  - At least 1 month at -20 to -70 °C under sterile conditions after reconstitution.

### BACKGROUND

**Description**

Monocyte chemoattractant protein-1 (MCP-1) (CCL2) is produced by many cell types at sites of inflammation. It regulates chemotaxis and transendothelial migration of monocytes, as well as memory T cells and natural killer cells by interacting with their membrane surface receptor CCR2. MCP-1 has also been implicated in a number of disease states, such as rheumatoid arthritis, atherosclerosis, autoimmune diseases, tumor progression, and HIV infection.

**References:**

1. "Monocyte Chemoattractant Protein-1 (MCP-1): An Overview"  
   Deshmam S., Kremlev S., Amini S., Sawaya B.  

2. "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"  
   Yoshimura T., Yuki N., Moore S. K., Appella E., Lerman M. I., Leonard E. J.  

3. "Monocyte chemoattractant protein-1: A key mediator in inflammatory processes"  
   Melgarejo E., Medina M., Sánchez-Jiménez F., Urdiales J.  