

**Product Name: Biotin-CCL4 (MIP-1b)**

Catalog Numbers: B-CCL4-2ug B-CCL4-10ug B-CCL4-50ug B-CCL4-100ug

**DESCRIPTION****Source** E. coli derived Accession # P13236 (24-92)**Modification** Biotinylated**Predicted Molecular Mass** 10,237.4973 Da**Extinction Coefficient** 18,020 M<sup>-1</sup> cm<sup>-1</sup>**SPECIFICATIONS****Activity** EC<sub>50</sub> = 0.32-1.3 nM determined by Migration Assay in cells expressing recombinant CCR5**Actual Molecular Mass** 10,237.4973 Da by ESI Mass Spec**(Mass Spec)****Endotoxin Level** <0.01 EU per 1µg of the protein by the LAL method**Purity** > 97% by SDS PAGE**Formulations** Lyophilized**Carrier Protein** None**PREPARATION AND STORAGE****Reconstitution** Spin tube prior to resuspending. Recommended at 100µg/mL in sterile water**Shipping** Room Temp**Stability and Storage****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**

Monokine with inflammatory and chemokinetic properties. Binds to CCR5. One of the major HIV-suppressive factors produced by CD8+ T-cells. Recombinant MIP-1-beta induces a dose-dependent inhibition of different strains of HIV-1, HIV-2, and simian immunodeficiency virus (SIV). The processed form MIP-1-beta(3-69) retains the abilities to induce down-modulation of surface expression of the chemokine receptor CCR5 and to inhibit the CCR5-mediated entry of HIV-1 in T-cells. MIP-1-beta(3-69) is also a ligand for CCR1 and CCR2 isoform B.

**References:**

1. "Identification of RANTES, MIP-1 alpha, and MIP-1 beta as the major HIV-suppressive factors produced by CD8+ T cells."  
Cocchi F., DeVico A.L., Garzino-Demo A., Arya S.K., Gallo R.C., Lusso P.  
Science 270:1811-1815 (1995)
2. "The assignment of chemokine-chemokine receptor pairs: TARC and MIP-1 beta are not ligands for human CC-chemokine receptor 8."  
Garlisi C.G., Xiao H., Tian F., Hedrick J.A., Billah M.M., Egan R.W., Umland S.P.  
Eur. J. Immunol. 29:3210-3215 (1999)
3. "Natural truncation of the chemokine MIP-1beta/CCL4 affects receptor specificity but not anti-HIV-1 activity."  
Guan E., Wang J., Roderiquez G., Norcross M.A.  
J. Biol. Chem. 277:32348-32352 (2002)