

Product Name: CCL4 (MIP-1b)

Catalog Numbers: CCL4-5ug CCL4-20ug CCL4-50ug CCL4-100ug CCL4-1mg

DESCRIPTION

Source	E. coli derived Accession # P13236 (24-92)
Modification	None
Actual Molecular Mass (Mass Spec)	Mol weight confirmed by mass spec
Predicted Molecular Mass	7.818 kDa
Extinction Coefficient	12570 M ⁻¹ cm ⁻¹
Protein Sequence	APMGSDPPTACCFSTARKLPRNFVVDYETSSLCSQPAVVFQTKRSKQVCADPSESWW QEYVYDLELN

SPECIFICATIONS

Activity	EC50 = 0.23 nM determined by Migration Assay in cells expressing recombinant CCR5
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 DMSO
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
- 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)