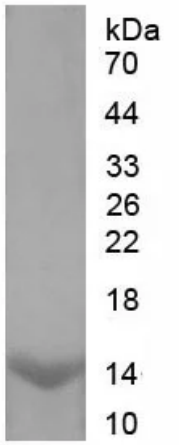
Active Macrophage Inflammatory Protein 1 Beta (MIP1b)

Catalog#:PXH12167

概述（Summary）

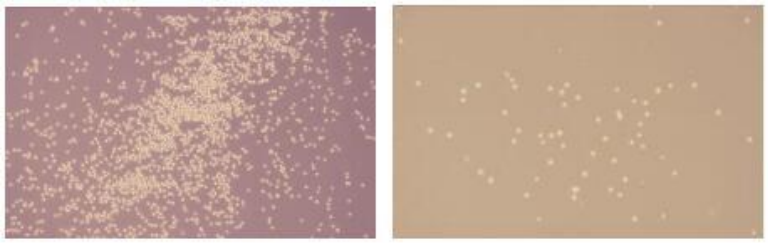
别称（Alternative Names）	CCL4; ACT2; G-26; LAG1; MIP1-B; SCYA4; Chemokine C-C-Motif Ligand 4; Small Inducible Cytokine A4; Homologous To Mouse Mip-1b
纯度（Purity）	Greater than 97% as determined by reducing SDS-PAGE.
内毒素（Endotoxin level）	Please contact with the lab for this information
蛋白构建（Construction）	【Ala24-Asn92】
Accession #	P13236
表达宿主（Host）	-
种属（Species）	Homo sapiens (Human)
预测分子量（Predicted MW）	11.5 kDa
制剂（Form）	Lyophilized from a 0.2 μm filtered solution of 20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
运输方式（Shipping）	The product is shipped with ice bag. Upon receipt, store it immediately at the temperature listed below.
稳定性&储存（Stability &Storage）	12 months at -20°C to -80°C in lyophilized state.6 months at -20°C to -80°C under sterile conditions after reconstitution.7-10 days at 2°C to 8°C under sterile conditions after reconstitution.Please minimize freeze-thaw cycles.
复溶（Reconstitution）	Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
背景介绍（References）	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.

电泳图（SDS-PAGE image）

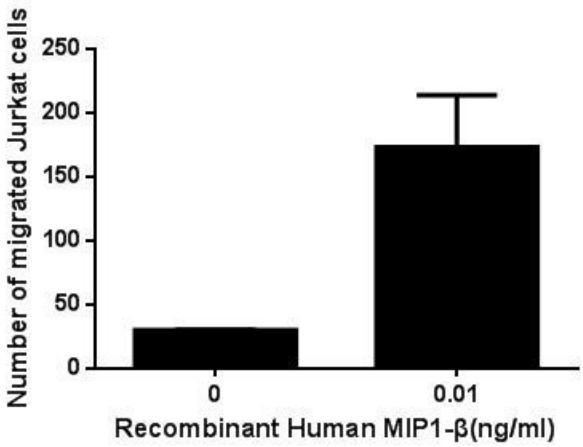


Greater than 97% as determined by reducing SDS-PAGE.

活性图（Bioactivity image）



Macrophage inflammatory protein-1β (MIP-1β), also known as CCL4 is a CC chemokine with specificity for CCR5 receptors. It is a chemoattractant for natural killer cells, monocytes and a variety of other immune cells. MIP-1β is a kind of chemotactic cytokine. Thus, chemotaxis assay used 24-well microchemotaxis system was undertaken to detect the chemotactic effect of MIP-1β on the human T-lymphocyte leukemia cell line Jurkat. Briefly, Jurkat cells were seeded into the upper chambers (100uL cell suspension, 5×105 cells/mL in RPMI 1640 with FBS free) and recombinant human MIP-1β (0.0001ng/mL, 0.001ng/mL, 0.1ng/mL, 1ng/mL, 10ng/mL, 100ng/mL diluted separately in serum free RPMI 1640) was added in lower chamber with a polycarbonate filter (8um pore size) used to separate the two compartments. After incubation at 37℃ with 5% CO2 for 2h, the
filter was removed, then cells in low chamber were observed by inverted microscope at low magnification (×100) and the number of migrated cells were counted at high magnification (×200) randomly (five fields for each filter). Result shows recombinant human MIP-1β is able to induce migration of Jurkat cells. The migrated Jurkat cells in low chamber at low magnification (×100) were shown in Figure 1. Five fields of each chamber were randomly chosen, and the migrated cells were counted at high magnification (×200). Statistical results were shown in Figure 2. The optimum chemotaxis of MIP-1β occurs at 0.1~10pg/mL.
(A)Jurkat cells were seeded into the upper chambers and serum free RPMI 1640 with 0.01ng/mL MIP-1β was added in lower chamber, then cells in lower chamber were observed at low magnification (×100) after incubation for 2h;
(B)Jurkat cells were seeded into the upper chambers and serum free RPMI 1640 without MIP-1β was added in lower chamber, then cells in lower chamber were observed at low magnification (×100) after incubation for 2h.
Figure. The chemotactic effect of recombinant human MIP-1β on Jurkat cells. Figure. The chemotactic effect of recombinant human MIP1-βon Jurkat cells.



注意事项（Note）

For Research Use Only , Not for Diagnostic Use.