Active Macrophage Inflammatory Protein 3 Alpha (MIP3a)

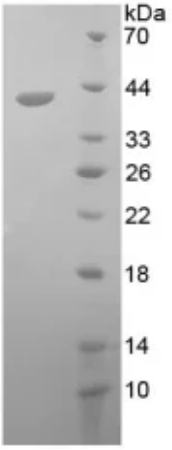
Catalog#:PXH12169

概述（Summary）

别称（Alternative Names）	CCL20; CKb4; LARC; MIP3-A; SCYA20; ST38; Small Inducible Cytokine Subfamily A(Cys-Cys)Member 20; Beta-Chemokine Exodus-1; Liver And Activation-Regulated Chemokine
纯度（Purity）	Greater than 90% as determined by reducing SDS-PAGE.
内毒素（Endotoxin level）	Please contact with the lab for this information
蛋白构建（Construction）	【Ala27-Met96】
Accession #	P78556
表达宿主（Host）	-
种属（Species）	Homo sapiens (Human)
预测分子量（Predicted MW）	38.0 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）	Acts as a ligand for C-C chemokine receptor CCR6. Signals through binding and activation of CCR6 and induces a strong chemotactic response and mobilization of intracellular calcium ions. The ligand-receptor pair CCL20-CCR6 is responsible for the chemotaxis of dendritic cells (DC), effector/memory T-cells and B-cells and plays an important role at skin and mucosal surfaces under homeostatic and inflammatory conditions, as well as in pathology, including cancer and various autoimmune diseases. CCL20 acts as a chemotactic factor that attracts

lymphocytes and, slightly, neutrophils, but not monocytes. Involved in the recruitment of both the proinflammatory IL17 producing helper T-cells (Th17) and the regulatory T-cells (Treg) to sites of inflammation. Required for optimal migration of thymic natural regulatory T cells (nTregs) and DN1 early thymocyte progenitor cells. C-terminal processed forms have been shown to be equally chemotactically active for leukocytes. Positively regulates sperm motility and chemotaxis via its binding to CCR6 which triggers Ca2+ mobilization in the sperm which is important for its motility. Inhibits proliferation of myeloid progenitors in colony formation assays. May be involved in formation and function of the mucosal lymphoid tissues by attracting lymphocytes and dendritic cells towards epithelial cells. Possesses antibacterial activity towards E.coli ATCC 25922 and S.aureus ATCC 29213.

电泳图（SDS-PAGE image）



Greater than 90% as determined by reducing SDS-PAGE.

活性图（Bioactivity image）

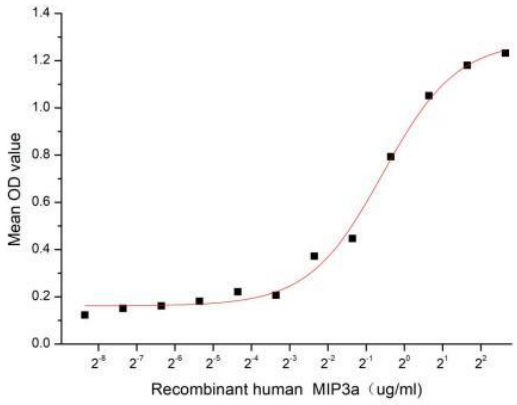


Figure 1. The binding activity of recombinant human MIP3a with recombinant human IL1a

Macrophage Inflammatory Protein 3 Alpha (MIP3a) also known as Chemokine (C-C motif) ligand 20 (CCL20) or liver activation regulated chemokine (LARC) is a small cytokine belonging to the CC chemokine family. It is strongly chemotactic for lymphocytes and weakly attracts neutrophils. MIP3a is implicated in the formation and function of mucosal lymphoid tissues via chemoattraction of lymphocytes and dendritic cells towards the epithelial cells surrounding these tissues. It is expressed in several tissues such as peripheral blood lymphocytes, lymph nodes, liver, appendix, fetal lung. Expression of MIP3a can be induced by microbial factors such as lipopolysaccharide (LPS), and inflammatory cytokines such as tumor necrosis factor and interferon-γ, and down-regulated by IL-10. Besides, Interleukin 1 Alpha (IL1a) has been identified as an interactor of MIP3a, thus a binding ELISA assay was conducted to detect the interaction of recombinant human MIP3a and recombinant human IL1a. Briefly, MIP3a were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 ul were then transferred to IL1a-coated microtiter wells and incubated for 2h at 37℃. Wells were washed with PBST and incubated for 1h with anti-MIP3a pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37℃. Finally, add 50 µL stop solution to the wells and read at 450nm immediately. The binding activity of MIP3a and IL1a was shown in Figure 1, and this effect was in a dose dependent manner, the EC50 for this effect is 0.676 ug/mL.

注意事项（Note）

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