

MIP-4/CCL18

Catalog # PVGS1096

Product Information

Primary Accession Species	P55774 Human
Sequence	Ala21-Ala89
Purity	> 97% as analyzed by SDS-PAGE > 97% as analyzed by HPLC
Endotoxin Level	
Biological Activity	Fully biologically active when compared to standard. The biological activity determined by a chemotaxis bioassay using human T-lymphocytes is in a concentration of 1.0-10.0 ng/ml.
Expression System	E. coli
Theoretical Molecular Weight	7.9 kDa
Formulation	Lyophilized from a 0.2 μm filtered solution in 20 mM PB, pH 7.4, 100 mM NaCl.
Reconstitution	It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/ml.
Storage & Stability	Upon receiving, this product remains stable for up to 6 months at -70°C or -20°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. Avoid repeated freeze-thaw cycles.

Additional Information

Gene ID	6362
Other Names	C-C motif chemokine 18, Alternative macrophage activation-associated CC chemokine 1, AMAC-1, CC chemokine PARC, Dendritic cell chemokine 1, DC-CK1, Macrophage inflammatory protein 4, MIP-4, Pulmonary and activation-regulated chemokine, Small-inducible cytokine A18, CCL18(1-68), CCL18(3-69), CCL18(4-69), CCL18, AMAC1, DCCK1, MIP4, PARC, SCYA18
Target Background	CCL18, is a novel CC chemokine that is highly homologous to MIP-1α (61% amino acid sequence identity). CCL18 cDNA encodes an 89 aa residue precursor protein with a 20 aa putative signal peptide that is cleaved to generate a 69 aa residue mature protein which lacks potential glycosylation sites. In vitro, CCL18 mRNA expression is induced in alternatively activated macrophages by Th2 cytokines such as IL-4, IL-10 and IL-13, and inhibited by

IFN- γ . CCL18 mRNA is also expressed by GM-CSF/IL-4-induced monocyte-derived dendritic cells. In vivo, CCL18 is highly expressed in lung and placenta but is not expressed in epidermal Langerhans cells. Recombinant CCL18 has been shown to chemoattract naive T cells, but not monocytes or neutrophils.

Protein Information

Name	CCL18
Synonyms	AMAC1, DCCK1, MIP4, PARC, SCYA18
Function	Chemotactic factor that attracts lymphocytes but not monocytes or granulocytes. May be involved in B-cell migration into B-cell follicles in lymph nodes. Attracts naive T-lymphocytes toward dendritic cells and activated macrophages in lymph nodes, has chemotactic activity for naive T-cells, CD4+ and CD8+ T-cells and thus may play a role in both humoral and cell-mediated immunity responses.
Cellular Location	Secreted.
Tissue Location	Expressed at high levels in lung, lymph nodes, placenta, bone marrow, dendritic cells present in germinal centers and T-cell areas of secondary lymphoid organs and macrophages derived from peripheral blood monocytes. Not expressed by peripheral blood monocytes and a monocyte-to-macrophage differentiation is a prerequisite for expression. Expressed in synovial fluids from patients with rheumatoid and septic arthritis and in ovarian carcinoma ascitic fluid

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