

Rev03 DATASHEET

Update: Dec,14,2021

## MIP-4/CCL18, Human

Cat. No.: Z02841

## **Product Introduction**

Species	Human
Protein Construction	MIP-4 (Ala21-Ala89) Accession # P55774
Purity	> 97% as analyzed by SDS-PAGE > 97% as analyzed by HPLC
Endotoxin Level	< 1 EU/µg of protein by LAL method
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.

## **Background**

**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.



**Synonyms:** CCL-18; chemokine (C-C motif) ligand 18 (pulmonary and activation-regulated); AMAC-1; AMAC1; CKb7; DC-CK1; DCCK1; MIP-4; PARC; SCYA18; C-C motif chemokine ligand 18

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