



## Technical Data Sheet

### Recombinant Human MIP-4 (rHuMIP-4/CCL18)

#### *Human MIP-4/CCL18*

CCL18, is a novel CC chemokine that is highly homologous to MIP-1 $\alpha$  (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- $\gamma$ . 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.

<b>Catalog Number:</b>	RC315-29
<b>Source:</b>	<i>Escherichia coli</i>
<b>Molecular Weight:</b>	7.8 kDa, a single non-glycosylated polypeptide chain containing 69 amino acids.
<b>Quantity:</b>	2 $\mu$ g/10 $\mu$ g/1mg
<b>Purity:</b>	>97% by SDS-PAGE and HPLC analyses.
<b>Biological Activity:</b>	Fully biologically active when compared to standard. Determined by its ability to chemoattract human T lymphocytes using a concentration range of 1.0 -10.0 ng/ml.
<b>Physical Appearance:</b>	Sterile Filtered White lyophilized (freeze-dried) powder.
<b>Formulation:</b>	Lyophilized from a 0.2 $\mu$ m filtered concentrated (1.0mg/ml) solution in 20mM PB, pH 7.4, 100mM NaCl.
<b>AA Sequence:</b>	AQVGTNKELCCLVYTSWQIPQKFIVDYSETSPQCPKPGVILLTKRGRQICAD PNKKWVQKYISDLKLNA
<b>Endotoxin:</b>	Less than 1EU/ $\mu$ g of rHuMIP-4/CCL18 as determined by LAL method.
<b>Reconstitution:</b>	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at $\leq$ -20°C. Further dilutions should be made in appropriate buffered solutions.
<b>Storage:</b>	This lyophilized preparation is stable at 2-8°C, but should be kept at -20°C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8°C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20°C to -70°C. <b>Avoid repeated</b>



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**Usage:**

**freeze/thaw cycles.**

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