

Rev03  
Update: Dec,14,2021

**DATASHEET**

# MIP-1 $\beta$ /CCL4, Human

Cat. No.: Z02831

## Product Introduction

<b>Species</b>	Human
<b>Protein Construction</b>	MIP-1 $\beta$ (Ala24-Asn92 ) Accession # P13236-1
<b>Purity</b>	> 96% as analyzed by SDS-PAGE > 96% as analyzed by HPLC
<b>Endotoxin Level</b>	< 1 EU/ $\mu$ g of protein by LAL method
<b>Biological Activity</b>	Fully biologically active when compared to standard. The biological activity determined by a chemotaxis bioassay using human peripheral blood monocytes is in a concentration range of 5.0-20.0 ng/ml.
<b>Expression System</b>	E. coli
<b>Theoretical Molecular Weight</b>	7.8 kDa
<b>Formulation</b>	Lyophilized from a 0.2 $\mu$ m filtered solution in 20 mM PB, pH 7.4, 150 mM NaCl.
<b>Reconstitution</b>	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.
<b>Storage &amp; Stability</b>	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 :** Macrophage inflammatory protein 1 beta (MIP-1 $\beta$ ), also known as Chemokine (C-C motif) ligand 4 (CCL4), is a small cytokine belonging to the CC chemokine family. It is a chemo attractant for natural killer cells, monocytes and a variety of other immune cells. MIP-1 $\beta$  is a major HIV-suppressive factor produced by CD8<sup>+</sup> T cells. Perforin-low memory CD8<sup>+</sup> T cells are the most common T-cells that normally synthesize MIP-1-beta in humans. MIP-1 $\beta$  has been shown to interact with CCL3. It can signal through the CCR5 receptor.

**Synonyms :** MIP-1 beta; Macrophage Inflammatory Protein-1 $\beta$ ; CCL-4; ACT-2

For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.