

Rev04 Update: Mar,01,2022

## DATASHEET

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

Cat. No.: Z03264

## **Product Introduction**

Species	Human
Protein Construction	MIP-1β (Ala24-Asn92 ) Accession # P13236-1
Purity	> 95% as analyzed by SDS-PAGE > 95% as analyzed by HPLC
Endotoxin Level	< 0.2 EU/ $\mu$ g of protein by gel clotting method
Biological Activity	The EC <sub>50</sub> value of human MIP-1 beta /CCL4 on Ca <sup>2+</sup> mobilization assay in CHO-K1/ G $\alpha$ 15/hCCR5 cells (human G $\alpha$ 15 and human CCR5 stably expressed in CHO-K1 cells) is less than 100.0 ng/ml.
Expression System	E. coli
Apparent Molecular Weight	~7.6 kDa, on SDS-PAGE under reducing conditions.
Formulation	Lyophilized after extensive dialysis against PBS.
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 ddH <sub>2</sub> O or PBS up to 100 $\mu$ g/ml.
Storage & Stability	Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

## Background

**Target Background :** Macrophage inflammatory protein 1 beta (MIP-1β), 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-1β 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-1β has been shown to interact with CCL3. It can signal through the CCR5 receptor.

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



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