

**MIP-1 $\beta$ /CCL4**  
**Catalog # PVGS1409****Specification**

---

**MIP-1 $\beta$ /CCL4 - Product Information**

Primary Accession [P13236-1](#)  
**Species**  
Human

**Sequence**  
Ala24-Asn92

**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

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.

**MIP-1 $\beta$ /CCL4 - Additional Information**

**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.

## **MIP-1 $\beta$ /CCL4 - Protein Information**

## **MIP-1 $\beta$ /CCL4 - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## **MIP-1 $\beta$ /CCL4 - Images**