

# PRODUCT DATA SHEET



Bioworld Technology, Inc.

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

Catalog Number: BK0137-1mg

Source: Escherichia coli.

Quantity: 1mg

### Description:

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 chemoattractant 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. Recombinant MIP-1 beta/CCL4 produced in E.coli is a single non-glycosylated polypeptide chain containing 69 amino acids. A fully biologically active molecule, rhMIP-1 beta/CCL4 has a molecular mass of 7.6 kDa analyzed by reducing SDS-PAGE and is obtained by chromatographic techniques at GenScript.

### Molecular Weight:

7.6 kDa, observed by reducing SDS-PAGE.

### Purity:

> 95% as analyzed by SDS-PAGE and HPLC.

### Biological Activity:

The EC50 value of human MIP-1 beta /CCL4 on Ca<sup>2+</sup> mobilization assay in CHO-K1/ Ga15/hCCR5 cells (human Ga15 and human CCR5 stably expressed in CHO-K1 cells) is less than 100 ng/ml.

### Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

### Formulation:

Lyophilized after extensive dialysis against PBS.

### AA Sequence:

APMGSDPPTACCFSYTARKLPRN-  
FVVDYYETSSLCSQPAV-  
VFQTKRSKQVCADPSESWVQEYVYDLELN

### Endotoxin:

< 0.2 EU/ $\mu$ g, determined by LAL method.

### Reconstitution:

Reconstituted in ddH<sub>2</sub>O or PBS at 100  $\mu$ g/ml.

### Storage:

Lyophilized recombinant human MIP-1 beta /CCL4 remains stable up to 6 months at -80  $^{\circ}$ C from date of receipt. Upon reconstitution, human MIP-1 beta /CCL4 should be stable up to 1 week at 4  $^{\circ}$ C or up to 2 months at -20  $^{\circ}$ C.

### Usage:

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