



11 Park Drive, Suite 12  
Boston, MA 02215

## Human Macrophage Inflammatory Protein-1 Beta (MIP-1Beta)

### ORDERING INFORMATION

Catalog No: rAP-0092;

Size: 2 µg; 10 µg

Storage: <- 20° C

### Synonyms:

Small inducible cytokine A4, CCL4, Macrophage inflammatory protein 1-beta, MIP-1- beta, MIP-1-beta(1-69), T-cell activation protein 2, ACT-2, PAT 744, H400, SIS-gamma, Lymphocyte activation gene 1 protein, LAG-1, HC21, G-26 T-lymphocyte-secreted protein, chemokine (C-C motif) ligand 4, ACT2, G-26, LAG1, MIP1B, SCYA4, AT744.1, MGC104418, MGC126025, MGC126026.

### Introduction:

Macrophage Inflammatory Proteins belong to the family of chemotactic cytokines known as chemokines. In humans, there are two major forms, MIP-1a and MIP-1b that are now also named CCL3 and CCL4. Both factors are produced by macrophages after they are stimulated with bacterial endotoxins. MIP-1a and MIP-1b activate human granulocytes (neutrophils, eosinophils and basophils) which can lead to acute neutrophilic inflammation. MIP-1a and MIP-1b induce synthesis and release of other pro-inflammatory cytokines such as interleukin-1 (IL-1), IL-6 and TNF-alpha from fibroblasts and macrophages. CCL3 and CCL4 genes are both located on human chromosome 17.

### Description:

Macrophage Inflammatory Protein-1 beta Human Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 69 amino acids and having a molecular mass of 7620 Dalton. The CCL4 is purified by proprietary chromatographic techniques.

### Source:

*Escherichia Coli.*

### Physical Appearance:

Sterile Filtered White Lyophilized (freeze-dried) powder.

### Formulation:

Lyophilized from a concentrated (1 mg/ml) solution in water containing no additives.

### Solubility:

It is recommended to reconstitute the lyophilized Macrophage Inflammatory Protein-1b in sterile 18MΩ-cm H<sub>2</sub>O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

### Stability:

Lyophilized MIP-1b although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution CCL4 should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

**Please prevent freeze-thaw cycles.**

### Purity:

Greater than 99.0% as determined by:

(a) Analysis by RP-HPLC.

(b) Analysis by SDS-PAGE.

Contact & Ordering Information: Angio-Proteomie, 11 Park Drive, Suite 12, Boston, MA 02215, USA. Fax: (480) 247-4337, [angioproteomie@gmail.com](mailto:angioproteomie@gmail.com)



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**Amino acid sequence:**

The sequence of the first five N-terminal amino acids was determined and was found to be, Ala-Pro-Met-Gly-Ser.

**Biological Activity:**

The Activity is calculated by the ability to chemoattract Human blood monocytes using a concentration of 5-20 ng/ml.

**Usage:**

Angio-Proteomie's products are furnished for LABORATORY RESEARCH USE ONLY. The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals.

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