

PRODUCT DATA SHEET

Product: MIP-1 β , human recombinant

Cat. No.: BC-300 (10 μ g)

Page 1 of 2

Synonyms:

Recombinant Human Macrophage Inflammatory Protein-1, CCL4, Small inducible cytokine A4 precursor, MIP-1-beta (1-69), T-cell activationprotein 2, ACT-2, PAT 744, H400, SIS-gamma, Lymphocyte activationgene 1 protein, LAG-1, HC21, G-26 T-lymphocyte-secreted protein.

Description:

Recombinant Human MIP-1 produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 69 amino acids and having a molecular mass of 7,620 Dalton. The rHuMIP-1 β is purified by proprietary chromatographic techniques.

Form:

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

Appearance:

Sterile-filtered white powder.

Gene:

CCL4 (LAG1, MIP1B, SCYA4)

Precursor's Functional Components:

MIP-1-beta (3-69)

Protein Family:

Belongs to the intercrine beta (chemokine CC) family.

Protein Domains:



Small chemokine, interleukin-8-like.

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.

Storage:

Recombinant Human MIP-1 β , although stable at room temperature for 3 weeks, should be stored desiccated below -18°C.

Upon reconstitution, Recombinant Human MIP-1 β should be stored at 4°C for between 2 – 7 days and below -18°C for storage longer than 7 days. For long term storage, it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid freeze-thaw cycles.

Solubility:

It is recommended to reconstitute the lyophilized Recombinant Human MIP-1 β in sterile 18 M Ω -cm H₂O not less than 100 μ g/mL, which can then be further diluted to other aqueous solutions.

Purity:

Greater than 99.0% as determined by:

- Analysis by RP-HPLC
- Anion-exchange FPLC
- Analysis by reducing and non-reducing SDS-Page Silver-Stained gel.

Protein content was determined by two independent methods: UV spectroscopy at 280 nm and Analysis by RP-HPLC, using a calibrated solution of Recombinant Human MIP-1 β as a reference standard.

Endotoxin:

Less than 0.1 ng/ μ g (IEU/ μ g) of Recombinant Human MIP-1 β .

Dimers and Aggregates:

Less than 1% as determined by silver-stained SDS-PAGE gel analysis.

Biological Activity:

Recombinant Human MIP-1 β is fully biologically active when compared to standards. The Activity is calculated by the ability to chemoattract human blood monocytes at a concentration of 5-20 ng/mL.

PRODUCT DATA SHEET

Cat. No.: BC-300 (10 µg)

Page 2 of 2

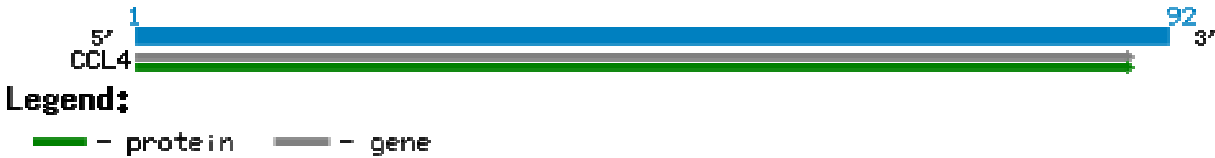
Limitations:

For LABORATORY RESEARCH USE ONLY. The product may not be used as drugs, agricultural or pesticide products, food additives or household chemicals. Not for use in diagnostics or in humans.

Warranty:

No warranties, expressed or implied, are made regarding the use of this product. KAMIYA BIOMEDICAL COMPANY is not liable for any damage, personal injury, or economic loss caused by this product.

Precursor – Protein Structure and Amino Acid Sequence:



Sequence:

