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MIP 1b Human

Macrophage Inflammatory Protein-1 Beta Human Recombinant (CCL4)
CHK0126

Product Overview

Name	MIP 1b Human

Description

Macrophage Inflammatory Protein-1 Beta Human Recombinant (CCL4)

Accession (Primary)	P13236

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.

Source

Escherichia Coli.

Physical Appearance

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation

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

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.

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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 5-20ng/ml corresponding to a Specific Activity of 50,000-200,000IU/mg.

Solubility

It is recommended to reconstitute the lyophilized Macrophage Inflammatory Protein-1b in sterile 18MΩ-cm H2O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

References

Title : CONFUSION BETWEEN CCL4 AND CCL4L1: AN EXAMPLE TO BEAR IN MIND WHEN USING THIRD-PARTY REAGENTS. Publication : Inmunologia Vol. 26 / Num 1/ Enero-Marzo 2007: 51-54 (Spanish). Link: MIP 1b prospec publication

Precautions

MIP 1b Human is for research use only and not for use in diagnostic or therapeutic procedures.

Target Information: (P13236)