

Macrophage Inflammatory protein-5 (CCL15), 68 amino acids, human recombinant (rHuMIP5-68aa)

Catalog No: 97623 Lot No: XXXXX Source: E. coli

Synonyms: Small inducible cytokine A15 precursor, CCL15, Macrophage inflammatory protein 5, MIP-5, MIP-5,

Chemokine CC-2, HCC-2, NCC-3, MIP- 1 delta, Leukotactin-1, LKN-1, Mrp-2b, C-C motif chemokine 15

Background

CCL15, a new human CC chemokine, was isolated from a human fetal spleen cDNA library. CCL15 cDNA encodes a predicted 113 amino acid (aa) protein containing a putative signal peptide of 21 amino acids that is cleaved to generate a 92 aa residue mature protein. Within the CC family members, human CCL15 shares 45%, 44%, 35%, and 30% aa homology with mouse C10, human MPIF-1, human HCC-1, and mouse MIP-1delta, respectively. The gene for MIP-5 is found on chromosome 17 where the genes for most of the human CC chemokines are located. Human CCL15 is expressed in T and B lymphocytes, NK cells, monocytes and monocyte-derived dendritic cells. Human MIP-5 is chemotactic for T cells and monocytes and has been shown to induce calcium flux in human CCR-1-transfected cells.

Description

Macrophage Inflammatory Protein-5 Human Recombinant produced in *E. coli* is a single, non-glycosylated, polypeptide chain containing 68 amino acids and having a molecular mass of 7.4 kDa. MIP5 is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile filtered white lyophilized (freeze-dried) powder.

Formulation

MIP5 was lyophilized from a 0.2 µm filtered concentrated solution containing PBS, pH 7.4.

Solubility

It is recommended to reconstitute the lyophilized MIP5 in sterile 18 M Ω -cm H $_2$ O not less than 100 μ g/ml, which can then be further diluted to other aqueous solutions.

Stability

Lyophilized MIP-5 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution CCL15 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 97.0% as determined by (a) Analysis by RP-HPLC, (b) Analysis by SDS-PAGE.

Amino Acid Sequence

SFHFAADCCT SYISQSIPCS LMKSYFETSS ECSKPGVIFL TKKGRQVCAK PSGPGVQDCM KKLKPYSI





Activity

Measured by its ability to chemoattract THP-1 human acute monocytic leukemia cells. The ED50 for this effect is typically 2-4 ng/ml.

Usage

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