

MIP-5/CCL15 (92aa), Human

Cat. No.: Z03225-1

Size: 1.0 mg

Synonyms: HCC-2, LKN-1, MIP-1 delta

Description:

Macrophage Inflammatory Protein-5 (MIP-5/CCL15) is a chemokine originally identified in the human hemofiltrate, thus it is also named Hemofiltrate CC Chemokine-2 (HCC-2). MIP-5 belongs to the CCL chemokine family, and its receptors are G-protein coupled receptors CCR1 and CCR3, with CCR1 being the major one. MIP-5 is mainly expressed in heart and skeletal muscle, and CCR1 is expressed on Th1 and Th2 cells in human cord blood lymphocytes. *In vivo*, MIP-5 promotes the accumulation of immature myeloid cells and the expansion of metastatic foci in the liver. MIP-5 contributes to severe asthma, sarcoidosis, and atherosclerosis; however, MIP-5 can also inhibit stem cell proliferation, implicating its therapeutic potential as an alternative to high dose chemotherapy.

Recombinant human MIP-5/CCL15 (rhMIP-5/CCL15) produced in *E.coli* is a single non-glycosylated polypeptide chain containing 92 amino acids. A fully biologically active molecule, rhMIP-5/CCL15 has a molecular mass of 10.2 kDa analyzed by reducing SDS-PAGE and is obtained by chromatographic techniques at GenScript.

Amino Acid Sequence:

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00001 QFTNDAETEL MMSKLPLENP VVLNSFHFAA DCCTSYISQS
00041 IPCSLMKSYF ETSSECSKPG VIFLTKKGRQ VCAKPSGPGV
00081 QDCMKKLPY SI
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Source: *E. coli*

Species: Human

Biological Activity: ED₅₀ < 2 µg/mL, measured by the FLIPR assay using CHO cells transfected with human CCR1, the receptor of human CCL15, corresponding to a specific activity of > 500 units/mg.

Molecular Weight: 10.2 kDa, observed by reducing SDS-PAGE.

Formulation: Lyophilized after extensive dialysis against PBS.

Reconstitution: Reconstituted in ddH₂O at 100 µg/mL.

Purity: > 95% by SDS-PAGE analysis.

Endotoxin Level: < 0.2 EU/µg, determined by LAL method.

Storage: Lyophilized recombinant human MIP-5/CCL15 (rhMIP-5/CCL15) remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, rhMIP-5/CCL15 remains stable up to 2 weeks at 4°C or up to 3 months at -20°C.