

MIP-1 α /CCL3, Human

Cat. No.: Z02830-20

Size: 20.0 ug

Synonyms: MIP-1 alpha/CCL3, Human;

Description:

Both MIP-1 alpha and MIP-1 beta are structurally and functionally related CC chemokines. They participate in the host response to invading bacterial, viral, parasite and fungal pathogens by regulating the trafficking and activation state of selected subgroups of inflammatory cells e.g. macrophages, lymphocytes and NK cells. While both MIP-1 alpha and MIP-1 beta exert similar effects on monocytes their effect on lymphocytes differ; with MIP-1 alpha selectively attracting CD8+ lymphocytes and MIP-1 beta selectively attracting CD4+ lymphocytes. Additionally, MIP-1 alpha and MIP-1 beta have also been shown to be potent chemoattractants for B cells, eosinophils and dendritic cells. Both human and mouse MIP-1 alpha and MIP-1 beta are active on human and mouse hematopoietic cells.

Amino Acid Sequence:

00001 ASLAADTPTA CCFSYTSRQI PQNFIADYFE TSSQCSKPGV
00041 IFLTKRSRQV CADPSEEWQ KYVSDLELSA

Source: *E. coli*

Species: Human

Biological Activity: Fully biologically active when compared to standard. The biological activity determined by a chemotaxis bioassay using human monocytes is in a concentration range of 1.0-10 ng/ml.

Molecular Weight: Approximately 7.8 kDa protein containing 70 amino acid residues, including the four highly conserved cysteine residues present in CC chemokines.

Formulation: Lyophilized from a 0.2 μ m filtered concentrated solution in 20 mM PB, pH 7.4, 100 mM NaCl.

Appearance: Sterile Filtered White lyophilized (freeze-dried) powder.

Reconstitution: We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.

Purity: > 96 % by SDS-PAGE and HPLC analyses.

Endotoxin Level: Less than 1 EU/ μ g of rHuMIP-1 α /CCL3 as determined by LAL method.

Storage: This lyophilized preparation is stable at 2-8 °C, but should be kept at -20 °C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8 °C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20 °C to -70 °C. Avoid repeated freeze/thaw cycles.