

RECOMBINANT HUMAN MACROPHAGE INFLAMMATORY PROTEIN-1a (hMIP-1a/CCL3)

Catalog # 02667
Catalog # 02867

10 mg per vial
50 mg per vial

PRODUCT DESCRIPTION:

MIP-1 α is a member of the β (CC) family of chemokines. It is produced by fibroblasts, monocytes, lymphocytes, neutrophils, eosinophils, smooth muscle cells, mast cells, platelets, bone marrow stromal cells, glial cells, epithelial cells, progenitors of dendritic Langerhans cells and several other cell lines. MIP-1 α is a chemoattractant for monocytes, T cells, B cells, basophils, eosinophils, neutrophils, NK cells, dendritic cells and osteoclasts. In addition, MIP-1 α acts as a stem cell inhibitory factor suppressing proliferation of hematopoietic precursors. Human MIP-1 α cDNA encodes a 92 amino acid residue precursor protein containing a 22 amino acid signal peptide. As reported for other chemokines cleavage of the amino terminus domain dramatically reduces its activity. MIP-1 α binds to CCR1, CCR4 and CCR5 receptors. The 66 amino acid residues recombinant protein has a predicted molecular mass of approximately 7.5 kDa.

SOURCE:

A DNA sequence encoding the mature human MIP-1 α protein was expressed in *E. coli*.

PURITY:

Greater than 97%, as determined by SDS-PAGE and visualized by silver-stain. Endotoxin level less than 0.1 ng per 1 μ g of the cytokine as determined by the LAL method.

FORMULATION:

Lyophilized from a 0.2 μ m filtered solution in 30% acetonitrile and 0.1% TFA, containing 50 μ g of bovine serum albumin per 1 μ g of cytokine.

RECONSTITUTION:

It is recommended that sterile PBS containing at least 0.1% human serum albumin or bovine serum albumin be added to the vial to prepare a stock solution of no less than 1 μ g/mL of the cytokine.

STABILITY/STORAGE:

Lyophilized samples are stable for greater than six months at -20°C to -70°C.

Reconstituted hMIP-1 α /CCL3 can be stored under sterile conditions at 2°C to 4°C for one month or at -20°C to -70°C for three months without detectable loss of activity.

Avoid repeated freeze-thaw cycles.

ACTIVITY:

Activity was determined by ability to chemoattract cultured human monocytes or BaF/3 cells transfected with the human CCR5 receptor and the ED₅₀ for the chemoattractant activity was typically 2 - 10 ng/mL or 3 - 10 ng/mL, respectively.

**THIS REAGENT IS FOR RESEARCH USE ONLY.
IT IS NOT TO BE ADMINISTERED TO HUMANS.**