

**RECOMBINANT MOUSE MACROPHAGE INFLAMMATORY PROTEIN-1 $\alpha$  (mMIP-1 $\alpha$ /CCL3)**

Catalog # 02767

10 mg per vial

Catalog # 02967

50 mg per vial

**PRODUCT DESCRIPTION:**

MIP-1 $\alpha$  is a member of the  $\beta$  (CC) family of chemokines. It is produced by T cells, B cells and monocytes after antigen or mitogen stimulation. MIP-1 $\alpha$  is a chemoattractant for monocytes, CD8<sup>+</sup> T cells, B cells, and eosinophils. In addition, MIP-1 $\alpha$  acts as a stem cell inhibitory factor suppressing proliferation of hematopoietic precursors. Mouse MIP-1 $\alpha$  cDNA encodes a 92 amino acid residue precursor protein containing a 23 amino acid signal peptide. As reported for other chemokines, cleavage of the amino terminus domain dramatically reduces its activity. MIP-1 $\alpha$  binds to CCR1, CCR4 and CCR5 receptors. The 69 amino acid residues recombinant protein has a predicted molecular mass of approximately 7.8 kDa.

**SOURCE:**

A DNA sequence encoding the mature mouse MIP-1 $\alpha$  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  $\mu$ g of the cytokine as determined by the LAL method.

**FORMULATION:**

Lyophilized from a 0.2  $\mu$ m filtered solution in 35% acetonitrile and 0.1% TFA, containing 50  $\mu$ g of bovine serum albumin per 1  $\mu$ 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 10  $\mu$ g/mL of the cytokine.

**STABILITY/STORAGE:**

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

Reconstituted mouse MIP-1 $\alpha$ /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 ED<sub>50</sub> for the chemoattractant activity was typically 5 - 25 ng/mL or 1.5 - 6 ng/mL, respectively.

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