

Product Information

Macrophage Inflammatory Protein 1 α human, recombinant expressed in *E. coli*

Product Number **M6292**

Storage Temperature –20 °C

Synonyms: MIP-1 α

Product Description

Macrophage inflammatory proteins (MIP) were originally co-purified from endotoxin-stimulated mouse macrophages.¹ Further biochemical analysis showed that MIP-1 was composed of two distinct, but highly related proteins, designated MIP-1 α and MIP-1 β .² The human MIP-1 α cDNA's which have been cloned include pLD78, pAT464, and GOS 19.² MIP-1 α is composed of 66 amino acids and has a molecular mass of 7,500 Da.

MIP-1 α belongs to the chemokine β subfamily characterized by a C-C configuration at the first two cysteines. MIP-1 α mRNA can be detected in macrophages associated with human atherosclerotic plaques.² The human MIP-1 α gene can be expressed by B cells stimulated with *S. aureus* Cowan strain,⁴ monocytes stimulated with LPS,¹ or T cells bound with CD3 antibody.³

This product is lyophilized from 0.2 μ m-filtered solution of 30% acetonitrile and 0.1% trifluoroacetic acid containing 0.5 mg bovine serum albumin.

The biological activity was measured by its ability to chemoattract cultured human monocytes or mouse BaF/3 cells transfected with human CCR5. The EC₅₀ is defined as the effective concentration of growth factor that elicits a 50% increase in cell growth in a cell based bioassay.

Purity: ≥97% (SDS-PAGE and N-terminal analysis)

Endotoxin: Tested

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Preparation Instructions

Reconstitute the contents of the vial using 0.2 μ m-filtered phosphate buffered saline containing 0.1% bovine serum albumin to a concentration not less than 1 μ g/ml.

Storage/Stability

Prior to reconstitution, store the product at –20 °C.

After reconstitution, store at 2–8 °C. For extended storage, freeze in working aliquots at –70 °C or –20 °C. Repeated freezing and thawing is not recommended.

References

1. Wolpe, S. *et al.*, *J. Exp. Med.*, **167**, 570 (1988).
2. Schall, T., *Cytokine*, **3(3)**, 165 (1991).
3. Obaur, K. *et al.*, *J. Biochem.*, **99**, 885 (1986).
4. Lipes, M. *et al.*, *Proc. Natl. Acad. Sci. USA*, **85**, 9704 (1988).
5. Graham, G. *et al.*, *Nature*, **344**, 442 (1990).

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