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Product Information

Macrophage Inflammatory Protein-1 γ

Mouse Recombinant

Product Number **M261**

Storage Temperature -20°C

Product Description

MIP-1 γ (Macrophage Inflammatory Protein 1 γ) is a novel CC chemokine independently cloned from a macrophage cDNA library and from a cDNA library of an IL-3-dependent pro-B cell line, Ba/F3. cDNA encodes a 122 amino acid residue precursor protein with a 21 or 22 residue predicted hydrophobic signal peptide that is cleaved to generate the 101 or 100 residue mature secreted protein. Shares approximately 45%, 24% and 20% amino acid sequence identity with mouse C10 (Product Code C260), mouse MIP-1 α (Product Code M259) and mouse MIP-1 β (Product Code M260), respectively. The gene has been mapped to mouse chromosome 11 where the genes for many mouse CC chemokines are clustered. Relatively high concentrations (1 $\mu\text{g/ml}$) have been detected in the serum.

Preparation Instructions

Reconstitute the contents of the vial using sterile phosphate buffered saline (PBS) containing at least 0.1% human serum albumin or bovine serum albumin to prepare a stock solution of no less than 10 $\mu\text{g/ml}$.

Storage/Stability

Prior to reconstitution, store tightly sealed at -20°C . After reconstitution and for continuous use, store at $2 - 8^{\circ}\text{C}$ for up to one month. For extended storage, solution may be frozen in working aliquots. Storage in "frost-free" freezers is not recommended. Repeated freezing and thawing is not recommended.

Procedure

The biological activity of MIP-1 γ was measured by its ability to chemoattract Y3 cells transfected with human CCR-3. The ED₅₀ for this effect is typically 0.02 – 0.06 $\mu\text{g/ml}$.

Product Profile

Source: A DNA sequence encoding mature mouse MIP-1 γ was expressed in *E. coli*.^{1,2,3}

Molecular Weight: Approx. 11.5 kDa recombinant protein containing 101 amino acids

Purity: >97% purity as determined by SDS-PAGE

Formulation: Lyophilized from a sterile filtered solution in 30% acetonitrile and 0.1% TFA, containing 50 μg of bovine serum albumin per 1 μg of cytokine

References

1. Poltorak, A., et al. *J. Inflamm.* **45**, 207-219 (1995).
2. Mohamadzadeh, M., et al. *J. Immunol.* **156**, 3102-3106 (1996).
3. Hara, T., et al. *J. Immunol.* **155**, 5352-5358 (1995).

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