



3050 Spruce Street
Saint Louis, Missouri 63103 USA
Telephone 800-325-5832 • (314) 771-5765
Fax (314) 286-7828
email: techserv@sial.com
sigma-aldrich.com

Product Information

MARC

Mouse Recombinant

Product Number **M-258**

Storage Temperature –20 °C

Product Description

Initially identified as a transcript induced in a mouse mast cell line (thus named MARC) after Fc epsilon RI triggering by IgE plus antigen, MARC may be the mouse homologue of the human MCP-3 (monocyte chemotactic protein 3) gene. MARC/MCP-3 expression has also been detected during murine experimental allergic encephalomyelitis in the spinal cord, and in LPS-stimulated murine WEHI-3 cells and Swiss 3T3 cells where MARC expression is glucocorticoid-attenuated. Except for one amino acid substitution, mouse MARC is identical to mouse FIC, the product of a growth factor-activated gene. The cDNA encodes a 97 amino acid residue precursor protein with a 23 residue signal peptide that is cleaved to yield a 74 residue mature protein. Mouse CCR2, a mouse chemokine receptor, has been shown to bind JE/MCP-1 with high affinity and MARC/MCP-3 with lower affinity.

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 µg/ml.

Storage/Stability

Prior to reconstitution, store tightly sealed at –20 °C. After reconstitution and for continuous use, store at 2 - 8 °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 MARC was measured by its ability to chemoattract 2-day cultured human monocytes.² The ED₅₀ for this effect is typically 0.1 – 0.3 µg/ml

Product Profile

Source: A DNA sequence encoding mature mouse MARC was expressed in *E. coli*.¹

Molecular Weight: Approx. 8.5 kDa recombinant protein containing 74 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. Kulmburg, P., et al. *J. Exp. Med.* **176**, 1773-1778 (1992).
2. Matsushima, K., et al. *J. Exp. Med.* **169**, 1485-1490 (1989).
3. Kurihara, T., Bravo, R. *J. Biol. Chem.* **271**, 11603-11606 (1996).
4. Thirion, S., et al. *Biochem. Biophys. Res. Commun.* **201**, 493-499 (1994).

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