

Product Information

ANTI-MCP-2 HUMAN

Anti-Monocyte Chemotactic Protein-2 , Human

Product Number **M-254**

Product Description

Anti-MCP-2 Human is developed by immunizing goats with purified *E. coli*-derived recombinant human MCP-2 as the immunogen. MCP-2 specific IgG was purified by MCP-2 affinity chromatography.

This antibody can be used in ELISA and immunoblotting assays and can neutralize the activity of human MCP-2.

MCP-2 and MCP-3 are two recently identified monocyte chemotactic proteins produced by human MG-63 osteosarcoma cells. Both MCP-2 and MCP-3 are members of the C-C family of chemokines and share 62% and 71% amino acid sequence identity, respectively, with MCP-1. MCP-3 also shares 58% amino acid identity with MCP-2. Similarly to other C-C chemokines, all three MCP proteins are monocyte chemoattractants. In addition, the three MCPs can chemoattract activated NK cells as well as CD4+ and CD8+ T lymphocytes. All three cytokines have also been shown to attract eosinophils and induce histamine secretion from basophils.

Reagents

Anti-MCP-2 , Human is supplied lyophilized from a sterile filtered solution in phosphate buffered saline (PBS).

Preparation Instructions

Reconstitute with sterile PBS: 1 ml will yield an antibody concentration of 0.1 mg/ml.

Neutralization: Neutralization Dose 50 (ND₅₀) is defined as the concentration of antibody required to yield one-half maximal inhibition of the cytokine activity on a responsive cell line, when that cytokine is present at a concentration just high enough to elicit a maximum

response. The ND₅₀ is approximately 2 - 5 µg/ml in the presence of 0.4 µg/ml of human MCP-2, using the human monocyte chemotaxis assay.

Storage/Stability

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.

Product Profile

Recommended starting dilutions for Anti-MCP-2 , Human in ELISA is 0.5 - 1.0 µg/ml. The detection limit is approximately 0.3 ng/well. In immunoblotting it can be used at 0.1 - 0.2 µg/ml. The detection limit is approximately 20 ng/lane under non-reducing and reducing conditions.

Specificity

Will not neutralize the biological activity of mouse JE/MCP-1, human MCP-1 (Cat. No. M-243) or human MCP-3 (Cat. No. M-245). Based on direct ELISA and immunoblotting results (non-reducing conditions), shows less than 40% cross-reactivity with human HCC-1 (Cat. No. H-176), less than 10% cross-reactivity with human eotaxin (Cat. No. E-158) and less than 5% cross-reactivity with human MCP-1. Shows no cross-reactivity with other cytokines tested using direct ELISA.

References

1. Van Damme, J., et al. *J. Exp. Med.* **176**, 59-65 (1992).
2. Weber, M., et al. *J. Immunol.* **154**, 4166-4172 (1995).

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