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Product Information

Anti-Macrophage Inflammatory Protein-1β
produced in goat, IgG fraction of antiserum

Catalog Number **M5917**

Synonym: Anti-MIP-1β

Product Description

Anti-Macrophage Inflammatory Protein-1β is produced in goat using as the immunogen a purified recombinant mouse macrophage inflammatory protein-1β, expressed in *Escherichia coli*. The antibody is purified by Protein G affinity chromatography.

Anti-Macrophage Inflammatory Protein-1β recognizes recombinant mouse MIP-1β by neutralization and immunoblotting. By immunoblotting, this antibody shows less than 2% cross-reactivity with recombinant mouse MIP-1α, recombinant human MIP-1α, and recombinant human MIP-1β.

Macrophage Inflammatory Protein-1β belongs to the chemokine β family. *In vitro,* MIP-1β can synergize with the hematopoietic growth factors granulocyte-macrophage colony stimulating factor (GM-CSF) or macrophage colony stimulating factor (M-CSF) to enhance colony formation.[1]

Reagent

Supplied lyophilized from a 0.2 μm filtered solution of phosphate buffered saline containing 5% trehalose.

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

To one vial of lyophilized powder, add 1 ml of 0.2 μm filtered phosphate buffered saline to produce a 1 mg/mL stock solution of antibody.

Storage/Stability

Prior to reconstitution, store at –20 °C. Reconstituted product may be stored at 2–8 °C for up to one month. For prolonged storage, freeze in working aliquots at –20 °C. Avoid repeated freezing and thawing. Do not store in frost-free freezer.

Product Profile

Neutralization: Anti-MIP-1β is tested for its ability to neutralize the biological activity of recombinant mouse MIP-1β in a chemotaxis assay using the human CCR5 transfected BaF/3 cells, when rmCCL4 was present at 0.025 μg/mL. This antibody will not neutralize the biological activity of rhMIP-1β, rhMIP-1α, or rmMIP-1α.

The ND_{50} of the antibody 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 exact concentration of antibody required to neutralize mouse MIP-1β activity is dependent on the cytokine concentration, cell type, growth conditions, and the type of activity studied.

Immunoblotting: a working antibody concentration of 1 μg/mL is recommended to detect recombinant mouse MIP-1β. The detection limit for recombinant mouse MIP-1β is 5 ng/lane under non-reducing and 25 ng/lane under reducing conditions. Because this antibody preparation is a total IgG fraction, complete monospecificity cannot be assumed.

Note: In order to obtain the best results using various techniques and preparations, we recommend determining the optimal working dilutions by titration.

References

1. Broxmeyer, H., et al., *J. Exp. Med.*, **170**, 1583 (1989).
2. Graham, G., et al., *Nature*, **344**, 442 (1990).

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