

Product Information

Anti-Interleukin 10

produced in goat, IgG fraction of antiserum

Catalog Number **I5020**

Product Description

Anti-Interleukin-10 is produced in goat using human, recombinant interleukin-10 (rhIL-10), expressed in the insect cell line Sf21, as the immunogen. The product is purified by Protein G affinity chromatography.

Anti-Interleukin-10 reacts with human interleukin-10 in various applications, including ELISA, immunoblotting, and neutralization. Anti-IL-10 neutralizes the bioactivity of rhIL-10, but not that of mouse, recombinant IL-10. In ELISA and immunoblotting, this antibody displays approximately 7% cross-reactivity with mouse, recombinant IL-10.

Interleukin-10 is a pleiotropic cytokine having actions that include inhibition of synthesis of several other cytokines and costimulation of thymocytes and mast cell proliferation.^{1,2}

Reagent

Lyophilized from 0.2 µm-filtered solution in phosphate buffered saline containing carbohydrates.

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the 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 PBS to produce a 1 mg/ml stock solution of Anti-IL-10. If aseptic technique is used, no further filtration should be needed for use in cell culture environments.

Storage

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.

Product Profile

Neutralization: Anti-IL-10 was tested for its ability to neutralize the bioactivity of rhIL-10 in a cell proliferation assay using the mouse mast cell line, MC/9.³ The ND₅₀ of the antibody is defined as the concentration of antibody resulting in a one-half maximal inhibition of bioactivity of rhIL-10, which is present at five times its own EC₅₀ (the concentration of rhIL-10 producing a one-half maximal bioactivity without antibody). In this bioassay, rhIL-10 was pre-incubated with various dilutions of the antibody for 1 hour at 37 °C in a 96 well multiwell plate. Then, MC/9 cells were added to each well to give a final concentration of 1×10^5 cells/ml in 0.1 ml containing 5 ng/ml rhIL-10. This was incubated for approximately 44 hours at 37 °C in a 5% CO₂ humidified incubator and then pulsed for 4 hours with ³H-thymidine. Cells were harvested onto glass filters and the ³H-thymidine incorporation into DNA was measured.

ND₅₀ = 4-40 µg/ml

ELISA: 0.25 µg/ml detects 1 ng/well of rhIL-10

Immunoblotting: 1 µg/ml antibody detects rhIL-10 at 0.2 ng/lane under both reducing and non-reducing conditions

References

1. Fiorentino, D. et al., *J. Exp. Med.*, **170**, 2081 (1989).
2. Howard, M. et al., *J. Clin. Immunol.*, **4**, 239 (1992).
3. Thompson-Snipes, L. et al., *J. Exp. Med.*, **173**, 507 (1991).

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