



Anti-human IL-19 Antibody

ORDERING INFORMATION

Catalog Number: AF1035

Lot Number: FPY01

Size: 100 µg

Formulation: 0.2 µm filtered solution in PBS with 5% trehalose

Storage: -20° C

Reconstitution: sterile PBS

Specificity: human IL-19

Immunogen: *E. coli*-derived rhIL-19

Ig Type: goat IgG

Applications: Neutralization of bioactivity
Western blot
Direct ELISA
Flow cytometry

Preparation

Produced in goats immunized with purified, *E. coli*-derived, recombinant human mature interleukin 19 (rhIL-19). Human IL-19 specific IgG was purified by human IL-19 affinity chromatography.

Formulation

Lyophilized from a 0.2 µm filtered solution in phosphate-buffered saline (PBS) with 5% trehalose.

Endotoxin Level

< 0.1 EU per 1 µg of the antibody as determined by the LAL method.

Reconstitution

Reconstitute with sterile PBS. If 1 mL of PBS is used, the antibody concentration will be 0.1 mg/mL.

Storage

Lyophilized samples are stable for twelve months from date of receipt when stored at -20° C to -70° C. Upon reconstitution, the antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. Reconstituted antibody can also be aliquotted and stored frozen at -20° C to -70° C in a manual defrost freezer for six months without detectable loss of activity. **Avoid repeated freeze-thaw cycles.**

Specificity

This antibody has been selected for its ability to neutralize human IL-19 bioactivity.

Neutralization of Human IL-19 Bioactivity

The exact concentration of antibody required to neutralize human IL-19 activity is dependent on the cytokine concentration, cell type, growth conditions and the type of activity studied. To provide a guideline, R&D Systems has determined the neutralization dose for this antibody under a specific set of conditions. The **Neutralization Dose₅₀ (ND₅₀)** for this antibody is defined as that 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 for this lot of anti-human IL-19 antibody was determined to be approximately 1 - 3 µg/mL in the presence of 3 ng/mL of rhIL-19, using BaF cells transfected with IL-20 R α and R β . The specific conditions are described in the figure legends.

Additional Applications

Direct ELISA - This antibody can be used at 0.5 - 1.0 µg/mL with the appropriate secondary reagents to detect human IL-19. The detection limit for rhIL-19 is approximately 0.3 ng/well.

Western blot - This antibody can be used at 0.1 - 0.2 µg/mL with the appropriate secondary reagents to detect human IL-19. The detection limit for rhIL-19 is approximately 5 ng/lane under non-reducing and reducing conditions.

Flow cytometry - This antibody can be used at 3 - 10 µg/mL/10⁶ cells with an appropriate secondary antibody for indirect immunofluorescence staining of cells by flow cytometry.

Optimal dilutions should be determined by each laboratory for each application.

FOR RESEARCH USE ONLY. NOT FOR USE IN HUMANS.

R&D Systems, Inc.
1-800-343-7475

Figure 1

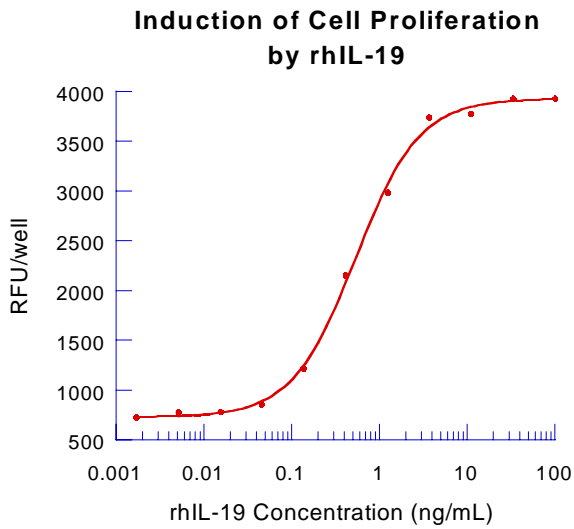


Figure 2

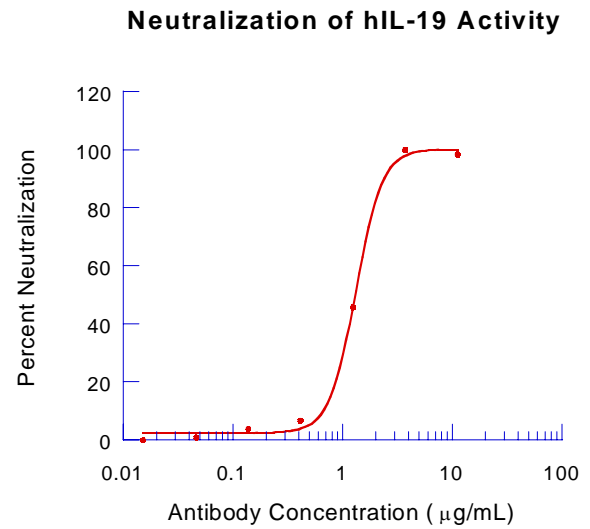


Figure 1

Recombinant human IL-19 stimulates proliferation of mouse BaF cells transfected with hIL-20 α and hIL-20 β in a dose-dependent manner. Resazurin (R&D Systems, Catalog # AR002) was added during the final 16 - 20 hours of incubation to quantitate cell growth. The relative fluorescence was then read in a fluorescent plate reader set at Ex. 544/Em. 590. The ED₅₀ for this effect is typically 0.5 - 1.5 ng/mL.

Figure 2

To measure the ability of the antibody to neutralize the bioactivity of human IL-19 on IL-20 R α and IL-20 R β transfected BaF cells, rhIL-19 was incubated with various concentrations of the antibody for 1 hour at 37° C in a 96 well plate. Following this preincubation period, cells were added. The assay mixture, in a total volume of 100 μ L, containing antibody at the concentrations indicated, rhIL-19 at 3 ng/mL and cells at 1×10^5 cells/mL was incubated at 37° C for 72 hours in a humidified CO₂ incubator. Resazurin (R&D Systems, Catalog # AR002) was added during the final 16 -20 hours of incubation to quantitate cell growth. The relative fluorescence was then read in a fluorescent plate reader set at Ex. 544/Em. 590. The ND₅₀ of the antibody is approximately 1 - 3 μ g/mL.