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ProductInformation

Anti-Human Interleukin-11
Developed in Goat
IgG Fraction of Antiserum

Product Number **I 5270**

Product Description

Anti-Human Interleukin-11 is developed in goat using human, recombinant interleukin-11 (rhIL-11), expressed in the insect cell line *Sf* 21, as the immunogen. The product is purified by Protein G affinity chromatography.

Interleukin-11 is a pleiotropic cytokine produced by mesenchymal-derived adherent cells. IL-11 shares many functions of IL-6 and LIF, including potentiation of megakaryocyte activity, enhancement of human myeloma cell proliferation, and enhancement of hepatic acute-phase protein production.[1,2] Anti-Human IL-11 neutralizes the bioactivity of rhIL-11. The product shows no cross-reactivity with other tested cytokines using indirect ELISA.

Reagents

Goat Anti-IL-11 is provided lyophilized from phosphate buffered saline, pH 7.4, to which no preservatives have been added.

Preparation Instructions

To one vial of lyophilized powder, add 1 ml of sterile-filtered PBS to produce a 1 mg/ml stock solution of Anti-Human IL-11. If aseptic technique is used, no further filtration should be needed for use in cell culture environments.

Storage/Stability

Store at 20 °C for 6 months.

Reconstituted product may be stored at 0-5 °C for up to one month. For prolonged storage, freeze in working aliquots at 20 °C. Avoid repeated freezing and thawing.

Product Profile

Anti-Human IL-11 was tested for its ability to neutralize the bioactivity of rhIL-11 in a cell proliferation assay using T11 cells, an IL-11 responsive subset of an IL-6 dependent mouse plasmacytoma cell line (T1165.85.2.1).[3] The ND_{50} of the antibody is defined as the concentration of antibody resulting in a one-half maximal inhibition of bioactivity of rhIL-11, which is present at five times its own EC_{50} (the concentration of rhIL-11 producing a one-half maximal bioactivity without antibody). In this bioassay, rhIL-11 was pre-incubated with various dilutions of the antibody for 1 hour at 37 °C in a 96-well microtiter plate. Then, T11 cells were added to each well to give a final concentration of 1×10^5 cells/ml in 0.2 ml containing 2.5 ng/ml rhIL-11. This was incubated for 48 hours at 37 °C in a 5% CO_2 humidified incubator and then pulsed for 4 hours with ^{3}H-thymidine. Cells were harvested onto glass filters and the ^{3}H-thymidine incorporation into DNA was measured.

References

1. Paul, S. R., et al., Proc. Natl. Acad. Sci. USA, **87**, 7512 (1990).
2. Kawashima, I., and Takiguchi, Y., Prog. Growth Factor Res., **4**, 191 (1992).
3. Nordan, R. P., et al., J. Immunol., **139**, 813 (1987).

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