ANTI-HUMAN TUMOR NECROSIS FACTOR-β (TNF-β)
Developed in Goat
IgG Fraction of Antiserum

Product No. T3176

Product Description
Anti-Human TNF- β is developed in goat using recombinant human tumor necrosis factor- β (TNF- β), expressed in E. coli, as the immunogen. The product is purified by Protein G affinity chromatography. Goat Anti-TNF- β is provided lyophilized from phosphate buffered saline (PBS), pH 7.4, to which no preservatives have been added.

Tumor Necrosis Factor-β (TNF- β, also known as lymphotoxin, is a lymphokine secreted by mitogen-activated T cells. It was initially identified as a mediator of cell-mediated hypersensitivity and a cytotoxic agent to several tumor cell lines. Anti-Human TNF- β neutralizes the bioactivity of rhTNF- β and natural human TNF- β. It will not neutralize the biological activity of human or mouse TNF-α.

Performance
Anti-Human TNF-β is tested for its ability to neutralize the biological activity of rhTNF- β on L929 cells. The ND50 of the antibody is defined as the concentration of antibody required for one-half maximal inhibition of bioactivity of rhTNF- β which is present at 5 times its own EC50 (the concentration of rhTNF- β producing a one-half maximal bioactivity without antibody). In this bioassay, rhTNF-β was pre-incubated with various dilutions of the antibody in culture medium containing actinomycin D for 1 hour at 37°C in a 96-well microtiter plate. Following this pre-incubation period, the antibody-antigen mixture was added to confluent cultures of L929 cells in 96-well microtiter plates to give a final concentration of 1 ng/ml rhTNF-β and 1.0 µg/ml actinomycin D in 0.1 ml. This was incubated for 24 hours at 37°C in a 5% CO2 humidified incubator and then fixed with 5% formaldehyde and stained with crystal violet.

Product Information
Mass/vial: 1.0 mg
Immunogen: Human, recombinant TNF-β
Host Animal: Goat
Formulation: Lyophilized from PBS without additives
Endotoxin: <10 ng/mg by LAL method
Bioactivity: ND50 = 0.1-1.6 µg/ml
Indirect ELISA: 1.0 µg/ml antibody detects 0.6 ng/well of rhTNF- β
Indirect Immunoblotting: 2 µg/ml antibody detects rhTNF- β at 5 ng/lane.
Sterility: 0.2 µm-filtered, aseptic fill

Reconstitution and Use
To one vial of lyophilized powder, add 1 ml of 0.2 µm-filtered PBS to produce a 1.0 mg/ml stock solution of Anti-Human TNF- β. 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 prolonged storage, freeze in working aliquots at −20°C. Avoid repeated freezing and thawing.

References