## TNF-α, murine recombinant

**CATALOG #**: 1051-10 10 μg

1051-50 50 μg 1051-1000 1 mg

SOURCE: E. coli

**PURITY:** >98% by SDS-PAGE and HPLC analyses.

Endotoxin level is <0.1 ng per  $\mu$ g of TNF- $\alpha$ .

MOL. WEIGHT: 17.5 kDa

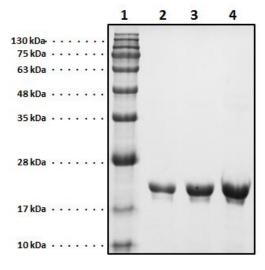
**FORMULATION:** Sterilized and lyophilized from 5 mM Tris, pH 8.0.

**RECONSTITUTION:** Centrifuge the vial prior to opening. Reconstitute in 10 mM acetic acid to a concentration of 0.1-1.0 mg/ml. This solution can then be diluted into other aqueous buffers and stored at 4°C for 1 week or -20°C for future use.

**STORAGE CONDITIONS:** The lyophilized TNF- $\alpha$  is best-stored desiccated below 0°C. Reconstituted TNF- $\alpha$  should be stored at working aliquots at -20°C.

**DESCRIPTION**: Tumor Necrosis Factor- $\alpha$  (TNF- $\alpha$ ) is a potent lymphoid factor that exerts cytotoxic effects on a wide range of tumor cells and certain other target cells. TNF is a cytokine involved in systemic inflammation and is a member of a group of cytokines that all stimulate the acute phase reaction. TNF is mainly secreted by macrophages. TNF causes apoptotic cell death, cellular proliferation, differentiation, inflammation, tumorigenesis and viral replication, TNF is also involved in lipid metabolism, and coagulation. TNF's primary role is in the regulation of immune cells. Dysregulation and, in particular, overproduction of TNF have been implicated in a variety of human diseases- autoimmune diseases, insulin resistance, and cancer. Murine TNF- $\alpha$  is a 17.5 kDa protein containing 156 amino acid residues.

**BIOLOGICAL ACTIVITY:** The ED<sub>50</sub> as determined by the cytolysis of murine L929 cells in the presence of actinomycin D is  $\leq 1$  ng/ml, corresponding to a specific activity of  $\geq 1 \times 10^6$  units/mg.



Murine Recombinant TNF-alpha

Lane 1: Markers

Lane 2: TNF-alpha (2.5 μg) Lane 3: TNF-alpha (5 μg) Lane 4: TNF-alpha (10 μg)

## **RELATED PRODUCTS:**

- TNF-alpha, human recombinant (Cat. No. 1050-10, -50, -1000)
- TNF-alpha, Human CellExp™, human recombinant (Cat. No. 6482-10, -50)
- TNF-alpha, rat recombinant (Cat. No. 1052-10, -50, -1000)
- TNF-alpha Antibody (Cat. No. 3052R-100)
- TNF-alpha Antibody (Cat. No. 3053R-100)
- TNF-alpha Antibody (Cat. No. 3054-100)

FOR RESEARCH USE ONLY! Not to be used on humans.

