

## Recombinant Rat TNF- $\alpha$

<b>CATALOG #:</b>	1052-10	10 $\mu$ g
	1052-50	50 $\mu$ g
	1052-1000	1 mg
<b>LOT #:</b>	_____	
<b>SOURCE:</b>	<i>E. coli</i>	
<b>PURITY:</b>	>95 % by SDS-PAGE and HPLC analyses. Endotoxin level is <0.1 ng per $\mu$ g of TNF- $\alpha$ .	
<b>MOL. WEIGHT:</b>	17.0 kDa	
<b>FORMULATION:</b>	Sterile filtered and lyophilized from 1X PBS	

### RECONSTITUTION:

We recommend a quick spin followed by reconstitution in water 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. Rat TNF- $\alpha$  is a 17 kDa protein containing 157 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  $\leq$  0.05 ng/ml, corresponding to a specific activity of  $\geq 2 \times 10^7$  units/mg.

### RECOMMENDED USAGE:

For most *in vitro* applications, TNF- $\alpha$  exerts its biological activity in the concentration range of 0.5 to 20 ng/ml.

### RELATED PRODUCTS:

#### Apoptosis Detection Kits & Reagents

- Annexin V Kits & Bulk Reagents
- Caspase Assay Kits & Reagents
- Mitochondrial Apoptosis Kits & Reagents
- Nuclear Apoptosis Kits & Reagents
- Apoptosis Inducers and Set
- Apoptosis siRNA Vectors

#### Cell Fractionation System

- Mitochondria/Cytosol Fractionation Kit
- Nuclear/Cytosol Fractionation Kit
- Membrane Protein Extraction Kit
- Cytosol/Particulate Rapid Separation Kit
- Mammalian Cell Extraction Kit
- FractionPREP Fractionation System

#### Cell Proliferation & Senescence

- Quick Cell Proliferation Assay Kit
- Senescence Detection Kit
- High Throughput Apoptosis/Cell Viability Assay Kits
- LDH-Cytotoxicity Assay Kit
- Bioluminescence Cytotoxicity Assay Kit
- Live/Dead Cell Staining Kit

#### Cell Damage & Repair

- HDAC Fluorometric & Colorimetric Assays & Drug Discovery Kits
- HAT Colorimetric Assay Kit & Reagents
- DNA Damage Quantification Kit
- Glutathione & Nitric Oxide Fluorometric & Colorimetric Assay Kits

#### Signal Transduction

- cAMP & cGMP Assay Kits
- Akt & JNK Activity Assay Kits
- Beta-Secretase Activity Assay Kit

#### Adipocyte & Lipid Transfer

- Recombinant Adiponectin, Survivin, & Leptin
- CETP Activity Assay & Drug Discovery Kits
- PLTP Activity Assay & Drug Discovery Kits
- Total Cholesterol Quantification Kit

#### Molecular Biology & Reporter Assays

- siRNA Vectors
- Cloning Insert Quick Screening Kit
- Mitochondrial & Genomic DNA Isolation Kits
- 5 Minutes DNA Ligation Kit
- 20 Minutes Gel Staining/Destaining Kit
- $\beta$  -Galactosidase Staining Kit & Luciferase Reporter Assay Kit

#### Growth Factors and Cytokines

#### Monoclonal and Polyclonal Antibodies