



# Recombinant Protein Technical Manual

## Recombinant Rat TNF-alpha/TNFA Protein (Active)

RPES3826

### Product Data:

**Product SKU:** RPES3826

**Size:** 5µg

**Species:** Rat

**Expression host:** E. coli

**Uniprot:** P16599

### Protein Information:

**Molecular Mass:** 17.4 kDa

**AP Molecular Mass:** 15 kDa

**Tag:**

**Bio-activity:** Measured in a cytotoxicity assay using L929 mouse fibrosarcoma cells in the presence of metabolic inhibitor actinomycin D.

The ED50 for this effect is typically 20-80 µg/ml.

**Purity:** > 93 % as determined by SDS-PAGE

**Endotoxin:** Please contact us for more information.

**Storage:** Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from sterile PBS, pH 7.4

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:** Cell Culture

**Synonyms:** Tnf;MGC124630;RATTNF;TNF-alpha;Tnfa

## Immunogen Information:

**Sequence:** Leu 80-Leu 235

## Background:

Tumor necrosis factor alpha (TNF-alpha), also known as TNF, TNFA or TNFSF2, is the prototypic cytokine of the TNF superfamily, and is a multifunctional molecule involved in the regulation of a wide spectrum of biological processes including cell proliferation, differentiation, apoptosis, lipid metabolism, and coagulation. Two receptors, TNF-R1 (TNF receptor type 1; CD120a; p55/60) and TNF-R2 (TNF receptor type 2; CD120b; p75/80), bind to TNF-alpha. TNF-alpha protein is produced mainly by macrophages, and large amounts of this cytokine are released in response to lipopolysaccharide, other bacterial products, and Interleukin (IL). TNF-alpha is involved in fighting against the tumorigenesis, thus, is regarded as a molecular insight in cancer treatment.