

# Recombinant Rat TNF alpha

Catalog # EPT089

**Expression Host** E.coli

**DESCRIPTION** Recombinant Rat Tumor Necrosis Factor is produced

by our E.coli expression system and the target gene

encoding Leu80-Leu235 is expressed.

Accession P16599

**Synonyms** Tumor Necrosis Factor; Cachectin; TNF-Alpha; Tumor

Necrosis Factor Ligand Superfamily Member 2; TNF-a;

Tumor Necrosis Factor; Membrane Form; Tumor

Necrosis Factor; Soluble Form; Tnf; Tnfa; Tnfsf2

Mol Mass 17.4 KDa

AP Mol Mass 14 KDa, reducing conditions

**Purity** Greater than 95% as determined by reducing

SDS-PAGE.

**Endotoxin** Less than 0.1 ng/μg (1 EU/μg) as determined by LAL

test.

**FORMULATION** Lyophilized from a 0.2 µm filtered solution of PBS, pH

7.4.



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#### RECONSTITUTION

Always centrifuge tubes before opening.Do not mix by vortex or pipetting.

It is not recommended to reconstitute to a concentration less than 100µg/ml.

Dissolve the lyophilized protein in distilled water.

Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

## **SHIPPING**

The product is shipped at ambient temperature.

Upon receipt, store it immediately at the temperature listed below.

## **STORAGE**

Lyophilized protein should be stored at < -20 ° C, though stable at room temperature for 3 weeks.

Reconstituted protein solution can be stored at 4-7°C for 2-7 days.

Aliquots of reconstituted samples are stable at < -20° C for 3 months.

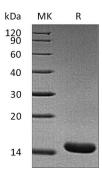
#### **BACKGROUND**

Tumor necrosis factor alpha (TNF-alpha, TNFSF2) is the prototypic ligand of the TNF superfamily. Rat TNF-alpha consisits of a 35 amino acid (aa) cytoplasmic domain, a 21 aa transmembrane segment, and a 179 aa extracellular domain (ECD). Within the ECD, rat TNF-alpha shares 94% aa sequence identity





with mouse. TNF-alpha is produced by a wide variety of immune, epithelial, endothelial, and tumor cells. TNF exists as a homotrimer and interacts with SPPL2B. TNF is mainly secreted by macrophages and can induce cell death of certain tumor cell lines. TNF is a key cytokine in the development of several inflammatory disorders. It contributes to the development of type 2 diabetes throught its effects on insulin resistance and fatty acid metabolism.



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