



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.





RECONSTITUTION

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

It is not recommended to reconstitute to a concentration less than 100 μ g/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 $< -20^{\circ}\text{C}$, though stable at room temperature for 3 weeks.

Reconstituted protein solution can be stored at $4-7^{\circ}\text{C}$ for 2-7 days.

Aliquots of reconstituted samples are stable at $< -20^{\circ}\text{C}$ for 3 months.

BACKGROUND

Tumor necrosis factor alpha (TNF-alpha, TNFSF2) is the prototypic ligand of the TNF superfamily. Rat TNF-alpha consists 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 through its effects on insulin resistance and fatty acid metabolism.

SDS-PAGE

