

---

## Product Data Sheet

---

Product Name: TNF alpha human  
 Cat. No.: GP20964  
 Batch No.: 1

### Product Data

Purity	>98%	Source	Escherichia Coli.
Physical Appearance	solid	Shipping Condition	Shipped at Room temp.
Synonyms	TNF-alpha; Tumor necrosis factor ligand superfamily member 2; TNF-a; Cachectin; DIF; TNFA; TNFSF2.		
Amino Acid Sequence	MVRSSSRTPS DKPVAHVVAN PQAEGQLQWL NRRANALLAN GVELRDNQLV VPSEGLYLIY SQVLFKGQGC PSTHVLLTHT ISRIAVSYQT KVNLLSAIKS PCQRETPEGA E AKPWYEPIY LGGVFQLEKG DRLSAEINRP DYLDFAESGQ VYFGIIAL.		
Formulation	PBS solution with protein concentration of 0.2 mg/mL. This solution can be diluted into other aqueous buffers.		

### Introduction

Tumor necrosis factor 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.

### Biological Activity

The Specific Activity is  $>5.06 \times 10^7$  IU/mg as determined by the cytolysis of murine L929 cells in the presence of Actinomycin D.

### Stability

Lyophilized Tumor Necrosis Factor- $\alpha$  although stable at room temperature for 3 weeks, should be stored desiccated below  $-18^\circ\text{C}$ . Upon reconstitution TNF- $\alpha$  should be stored at

**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

---

---

## Product Data Sheet

---

4°C between 2-7 days and for future use below -18°C .For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).Please prevent freeze-thaw cycles.

### Background

Tumor Necrosis Factor- $\alpha$  Human Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 158 amino acids (157 a.a. of the mature human TNF- $\alpha$  and an N-terminal methionine) and having a molecular mass of 17.5kDa. The TNF- $\alpha$  is purified by standard chromatographic techniques.

**Caution: Product has not been fully validated for medical applications. For research use only.**

**Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com**

**Address: 10292 Central Ave. #205, Montclair, CA, USA**