

---

## Product Data Sheet

---

Product Name: TNF b Human  
 Cat. No.: GP20979  
 Batch No.: 1

### Product Data

Purity	>98%	Source	Escherichia Coli.
Physical Appearance	solid	Shipping Condition	Shipped at Room temp.
Synonyms	Lymphotoxin-alpha; LT-alpha; TNF-beta; Tumor necrosis factor ligand superfamily member 1; LTA; LT; TNFB; TNFSF1.		
Amino Acid Sequence	MLPGVGLTPS AAQTARQHPK MHLAHSTLKP AAHLIGDPSK QNSLLWRANT DRAFLQDGFS LSNNLLVPT SGIYFVYSQV VFSGKAYSPK ATSSPLYLAH EVQLFSSQYP FHVPLLSSQK MVYPGLQEPW LHSMYHGAAF QLTQGDQLST HTDGIPHLVL SPSTVFFGAF AL.		
Solubility	It is recommended to reconstitute the lyophilized Tumor Necrosis Factor-beta in sterile 18MΩ-cm H <sub>2</sub> O not less than 100μg/ml, which can then be further diluted to other aqueous solutions.		
Formulation	Lyophilized protein with no additives.		

### Introduction

Lymphotoxin alpha, a member of the tumor necrosis factor family, is a cytokine produced by lymphocytes. LTA is highly inducible, secreted, and exists as homotrimeric molecule. LTA forms heterotrimers with lymphotoxin-beta which anchors lymphotoxin-alpha to the cell surface. LTA mediates a large variety of inflammatory, immunostimulatory, and antiviral responses. LTA is also involved in the formation of secondary lymphoid organs during development and plays a role in apoptosis.

### Biological Activity

The ED<sub>50</sub> as determined by the cytolysis of murine L929 cells in the presence of Actinomycin D is < 0.05ng/ml, corresponding to a Specific Activity of 20,000,000IU/mg.

### Stability

Lyophilized Tumor Necrosis Factor-b although stable at room temperature for 3 weeks,

**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

---

should be stored desiccated below  $-18^{\circ}\text{C}$ . Upon reconstitution TNF-b should be stored at  $4^{\circ}\text{C}$  between 2-7 days and for future use below  $-18^{\circ}\text{C}$ . 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-b Human Recombinant (Lymphotoxin) produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 172 amino acids and having a molecular mass of 18645 Dalton. The TNF-b 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**