# **PRODUCT INFORMATION**

**Expression system** E.coli

**Domain** 35-205aa

**UniProt No.** P01374

NCBI Accession No. NP\_001153212

### **Alternative Names**

Lymphotoxin-alpha, LT-alpha, TNF-beta, Tumor necrosis factor ligand superfamily member 1, TNFB, TNFSF1, TNF superfamily, member 1

## **PRODUCT SPECIFICATION**

### **Molecular Weight**

20.9 kDa (192aa) confirmed by MALDI-TOF

### Concentration

0.25mg/ml (determined by Bradford assay)

### Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 30% glycerol, 0.1M NaCl, 1mM DTT

**Purity** > 90% by SDS-PAGE

### **Endotoxin level**

< 1 EU per 1ug of protein (determined by LAL method)

### **Biological Activity**

Measured in a cytotoxicity assay using L-929 mouse fibroblast cells in the presence of the metabolic inhibitor actinomycin D. The ED50 range  $\leq 1$ ng/ml.

# Tag

His-Tag

# Application

SDS-PAGE, Bioactivity

### **Storage Condition**

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.



### BACKGROUND

### Description

TNF beta, a member of the tumor necrosis factor family, is a cytokine produced by lymphocytes. The protein is highly inducible, secreted, and forms heterotrimers with lymphotoxin-beta which anchor lymphotoxin-alpha to the cell surface. This protein also mediates a large variety of inflammatory, immunostimulatory, and antiviral responses, is involved in the formation of secondary lymphoid organs during development and plays a role in apoptosis. Recombinant TNF beta protein was expressed in E. coli and purified by using conventional chromatography techniques.

### Amino acid Sequence

MGSSHHHHHH SSGLVPRGSH MLPGVGLTPS AAQTARQHPK MHLAHSTLKP AAHLIGDPSK QNSLLWRANT DRAFLQDGFS LSNNSLLVPT SGIYFVYSQV VFSGKAYSPK ATSSPLYLAH EVQLFSSQYP FHVPLLSSQK MVYPGLQEPW LHSMYHGAAF QLTQGDQLST HTDGIPHLVL SPSTVFFGAF AL

### **General References**

Messer G, et al. (1991) J Exp Med. 173(1):209-19 Banner DW, et al. (1993) Cell. 73(3):431-45.

## DATA



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

# 15% SDS-PAGE (3ug)

**Biological Activity** 



NKMAXBio we support you, we believe in your research Recombinant human LTA/TNF-beta protein Catalog Number: ATGP0517

Human Lymphotoxin alpha1/TNF beta (ng/ml)



Human TNF-beta induces cell cytotoxicity in the L-929 mouse fibroblast cells in the presence of the metabolic inhibitor actinomycin D.