PRODUCT INFORMATION

Expression system Baculovirus

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

19.7 kDa (180aa)

Concentration

0.5mg/ml (determined by absorbance at 280nm)

Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

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 ≤ 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

LTA, also known as lymphotoxin alpha and tumor necrosis factor beta, belongs to the tumor necrosis factor family. It is highly inducible, secreted, and forms heterotrimers with lymphotoxin beta which anchor lymphotoxin alpha to the cell surface. It is expressed by activated naive CD4 cells, unpolarized IL2 secreting effectors, and Th1 effectors and mediates a large variety of inflammatory, immunostimulatory, and antiviral responses. Recombinant human LTA, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques

Amino acid Sequence

<ADP>LPGVGLT PSAAQTARQH PKMHLAHSTL KPAAHLIGDP SKQNSLLWRA NTDRAFLQDG FSLSNNSLLV PTSGIYFVYS QVVFSGKAYS PKATSSPLYL AHEVQLFSSQ YPFHVPLLSS QKMVYPGLQE PWLHSMYHGA AFQLTQGDQL STHTDGIPHL VLSPSTVFFG AFAL<HHHHHH>

General References

Messer G., et al. (1991) J Exp Med. 173:209-219. Gramaglia I., et al. (1999) J Immunol 162:1333-1338

DATA

SDS-PAGE



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

Biological Activity



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

