



Product Datasheet

Product Name	Recombinant Human Tumor Necrosis Factor-Beta
Cata No	CB500126
Source	<i>Escherichia Coli.</i>
Synonyms	Lymphotoxin-alpha, LT-alpha, TNF-beta, Tumor necrosis factor ligand superfamily member 1, LTA, LT, TNFB, TNFSF1.

Description

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.

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.

Physical Appearance

Sterile Filtered White lyophilized powder.

Biological Activity

The ED50 as determined by the cytolysis of murine L929 cells in the presence of Actinomycin D is < 0.05 ng/ml, corresponding to a Specific Activity of 2×10^7 IU/mg.

Purity

Greater than 98.0% as determined by:

(a) Analysis by RP-HPLC.

(b) Analysis by SDS-PAG.

Formulation

Lyophilized protein with no additives.

Reconstitution

It is recommended to reconstitute the lyophilized Tumor Necrosis Factor-beta in sterile 18MΩ-cm H2O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

Stability

Lyophilized Tumor Necrosis Factor-b although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution TNF-b should be stored at 4°C between 2-7 days and for future use below -18°C.

Sequence

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

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