11 Park Drive, Suite 12
Boston, MA 02215

Human Tumor Necrosis Factor-Beta (TNF-b)

ORDERING INFORMATION

Catalog No: rAP-0163;
Size: 5 µg; 20 µg
Storage: <- 20° C

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

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.

Description:
Tumor Necrosis Factor-b Human Recombinant (Lymphotoxin) produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 171 amino acids and having a molecular mass of 18645 Dalton. The TNF-b is purified by standard chromatographic techniques.

Source:
Escherichia Coli.

Physical Appearance:
Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation:
Lyophilized protein with no additives.

Solubility:
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.
For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).
Please prevent freeze-thaw cycles.

Purity:
Greater than 98.0% as determined by:
(a) Analysis by RP-HPLC.
(b) Analysis by SDS-PAG.

Amino acid sequence:
The sequence of the first five N-terminal amino acids was determined and was found to be Met-Val-Arg-Ser-Ser.

Contact & Ordering Information: Angio-Proteomie, 11 Park Drive, Suite 12, Boston, MA 02215, USA. Fax: (480) 247-4337, angioproteomie@gmail.com

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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 x10^7 IU/mg.

Protein content:

Protein quantitation was carried out by two independent methods:

1. UV spectroscopy at 280 nm using the absorbency value of 1.082 as the extinction coefficient for a 0.1% (1mg/ml) solution. This value is calculated by the PC GENE computer analysis program of protein sequences (IntelliGenetics).

2. Analysis by RP-HPLC, using a calibrated solution of TNF-b as a Reference Standard.

Usage:

Angio-Proteomie's products are furnished for LABORATORY RESEARCH USE ONLY. The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals.