LTA
Recombinant Human Tumor Necrosis Factor beta

Catalog No.	CRT103A	**Quantity:**	5 µg
	CRT103B		20 µg
	CRT103C		1.0 mg

Alternate Names: Lymphotoxin-alpha, LT-alpha, TNF-beta, tumor necrosis factor ligand superfamily member 1, 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.

Recombinant Human TNF-beta is a single, non-glycosylated, polypeptide chain containing 172 amino acids and purified by proprietary techniques.

GeneID: 4049

Source: *E. coli*

Molecular Weight: 18.645 kDa

Formulation: Sterile filtered and then lyophilized with no additives.

Purity: >95.0% as determined by RP-HPLC and SDS-PAGE analyses.

Endotoxin Level: Less than 0.1 ng/µg (1 EU/µg) of recombinant Human TNF-beta.

Biological Activity: The ED_{50} as determined by the cytolysis of mouse L929 cells in the presence of Actinomycin D is < 0.05 ng/ml.

Specific Activity: 2 x 10^7 IU/mg.

Amino Acid Sequence: MLPGVGLTPS AAQTARQHPK MHLAHSTLKP AAHLIGDPSK QNSLLWRANT DRAFLQDGFS LSNNSLLVPT SGIYFVYSQV VFSGKAYSPK ATSSPLYLAH EVQLFSSQYP FHVPLLSSQK MVYPGLQEPW LHSMYHGAAF QLTQGDQLST HTDGIPHLVL SPSTVFFGAF AL

Reconstitution: **Centrifuge vial prior to opening**. First add sterile water to the vial to fully solubilize the protein to a concentration not less than 100 µg/ml. After complete solubilization of the protein, it can be further diluted to other aqueous solutions.

Storage & Stability: Store lyophilized protein at -20°C to -80°C. Reconstituted protein is stable for 1 week at 2 -4°C. For long term storage, aliquot and store at -20°C to -80°C with a carrier protein such as 0.1% HSA or BSA as a stabilizer. This depends upon the particular application employed. **Avoid repeated freeze-thaw cycles.**

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