

## LTA

### Recombinant Human TNF-beta / TNFSF1 / Lymphotoxin alpha

<b>Catalog No.</b>	CRH434A CRH434B CRH434C	<b>Quantity:</b>	20 µg 100 µg 1.0 mg
<b>Alternate Names:</b>	Lymphotoxin-alpha, LT-alpha, TNF-beta, Tumor necrosis factor ligand superfamily member 1		
<b>Description:</b>	Lymphotoxin-alpha is a secreted protein which belongs to the tumor necrosis factor family, and is highly inducible, secreted, and exists as homotrimeric molecule. It is a cytokine that in its homotrimeric form binds to TNFRSF1A / TNFR1, TNFRSF1B / TNFBR and TNFRSF14 / HVEM. In its heterotrimeric form with LTB, Lymphotoxin-alpha binds to TNFRSF3 / LTBR. Lymphotoxin is produced by lymphocytes and cytotoxic for a wide range of tumor cells. TNF-beta/TNFSF1/Lymphotoxin alpha forms heterotrimers with lymphotoxin-beta which anchors lymphotoxin-alpha to the cell surface. It mediates a large variety of inflammatory, immunostimulatory, and antiviral responses. TNF-beta/TNFSF1/Lymphotoxin alpha is also involved in the formation of secondary lymphoid organs during development and plays a role in apoptosis. Genetic variations in TNF-beta/TNFSF1/Lymphotoxin alpha are a cause of susceptibility psoriatic arthritis.		
<b>UniProt ID:</b>	P01374		
<b>Protein Construction:</b>	A DNA sequence encoding the mature form of human TNF $\beta$ (Leu 35-Leu 205) was expressed and purified, with an initial Met at the N-terminus.		
<b>Source:</b>	E. coli		
<b>Molecular Weight:</b>	The recombinant human TNF $\beta$ comprises 172 amino acids and predicts a molecular mass of 18.8 kDa as estimated in SDS-PAGE under reducing conditions.		
<b>Formulation:</b>	Lyophilized from sterile 50mM Tris, pH 8.0 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.		
<b>Purity:</b>	> 97 % as determined by SDS-PAGE.		
<b>Biological Activity:</b>	Measured in a cytotoxicity assay using L929 mouse fibrosarcoma cells in the presence of the metabolic inhibitor actinomycin D. The ED <sub>50</sub> for this effect is typically 0.01-0.1 ng/mL.		
<b>Predicted N-terminal:</b>	Met		
<b>Reconstitution:</b>	<b>Centrifuge vial prior to opening.</b> Add sterile distilled water to a concentration of 0.1 mg/mL and gently pipette the solution up and down the sides of the vial. <b>DO NOT VORTEX.</b> Allow several minutes for complete reconstitution.		



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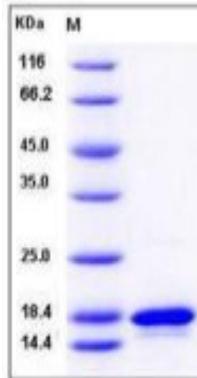
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**Storage & Stability:** Stable for up to 1 year from date of receipt at -20°C to -80°C  
After reconstitution, store working aliquots at -20°C to -80°C.  
**Avoid repeated freeze-thaw cycles.**

SDS-PAGE



NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.



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