

DESCRIPTION

Source	<i>E. coli</i> -derived Leu35-Leu205, with an N-terminal Met Accession # P01374
N-terminal Sequence Analysis	Met
Predicted Molecular Mass	19 kDa

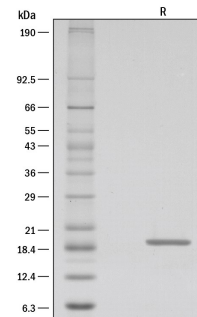
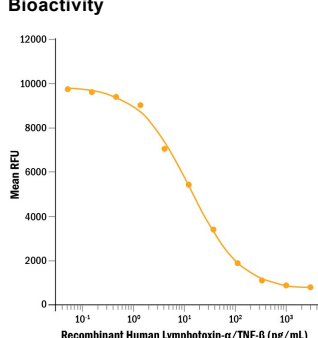
SPECIFICATIONS

SDS-PAGE	17-19 kDa, reducing conditions
Activity	Measured in a cytotoxicity assay using L-929 mouse fibroblast cells in the presence of the metabolic inhibitor actinomycin D. Matthews, N. and M.L. Neale (1987) in <i>Lymphokines and Interferons, A Practical Approach</i> . Clemens, M.J. <i>et al.</i> (eds): IRL Press. 221. The ED ₅₀ for this effect is typically 4-20 pg/mL.
Endotoxin Level	<0.01 EU per 1 μ g of the protein by the LAL method.
Purity	>95%, by SDS-PAGE under reducing conditions and visualized by silver stain.
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 100 μ g/mL in PBS containing at least 0.1% human or bovine serum albumin.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 3 months, -20 to -70 °C under sterile conditions after reconstitution.

DATA

<p>SDS-PAGE</p>  <p>1 μg/lane of Recombinant Human Lymphotoxin-α/TNF-β was resolved with SDS-PAGE under reducing (R) conditions and visualized by silver staining, showing a band at 19 kDa.</p>	<p>Bioactivity</p>  <p>Recombinant Human Lymphotoxin-α/TNF-β (Catalog # 211-TBB) induces cytotoxicity in the L-929 mouse fibroblast cell line in the presence of the metabolic inhibitor actinomycin D. The ED₅₀ for this effect is typically 4-20 pg/mL.</p>
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BACKGROUND

Lymphotoxin- α (LT- α), also known as Tumor Necrosis Factor- β (TNF- β), is a member of the TNF Superfamily. Human LT- α /TNF- β is a 22 kDa protein that shares 73% amino acid sequence identity with mouse and rat LT- α /TNF- β (1-3). Secreted LT- α forms homotrimers that bind and activate TNF RI/TNFRSF1A, TNF RII/TNFRSF1B, and HVEM/TNFRSF14 (4). LT- α /TNF- β also forms heterotrimers with plasma membrane-localized LT- β to bind and activate the LT- β R/TNFRSF3 (4). In addition to its cytotoxic action on tumor cells, LT- α /TNF- β mediates lymph node development, inflammation, and immune function (5-8). LT- α /TNF- β is expressed in activated T- and B lymphocytes and contributes to autoimmune disease (9, 10).

References:

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