

DESCRIPTION

Source *E. coli*-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 *Lymphokines and Interferons, A Practical Approach*. Clemens, M.J. *et al.* (eds): IRL Press. 221. The ED₅₀ 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. See Certificate of Analysis for details.

PREPARATION AND STORAGE

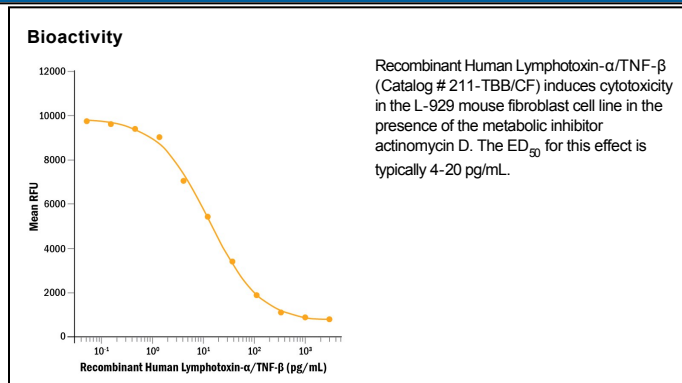
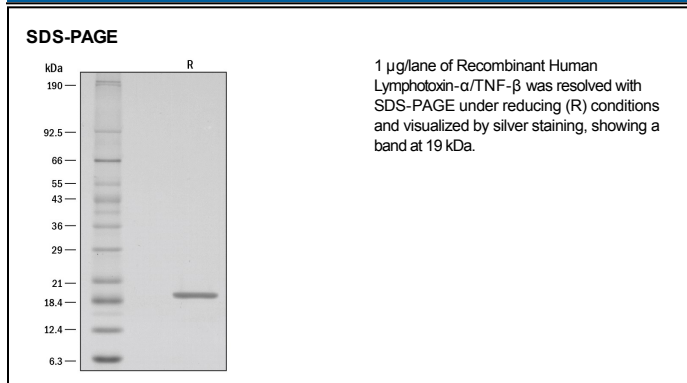
Reconstitution Reconstitute at 100 μ g/mL in PBS.

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.

- 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



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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4. Warzocha, K. *et al.* (1995) *Eur. Cytokine Netw.* **6**:83.
5. McCarthy, D.D. *et al.* (2006) *Immunol. Res.* **35**:41.
6. Drutskaya, M.S. *et al.* (2010) *IUBMB Life* **62**:283.
7. De Togni, P. *et al.* (1994) *Science* **264**:703.
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9. Mapara, M.Y. *et al.* (1994) *Int. J. Cancer* **58**:248.
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