

PRODUCT INFORMATION



Lymphotoxin- β (cynomolgus monkey, recombinant)

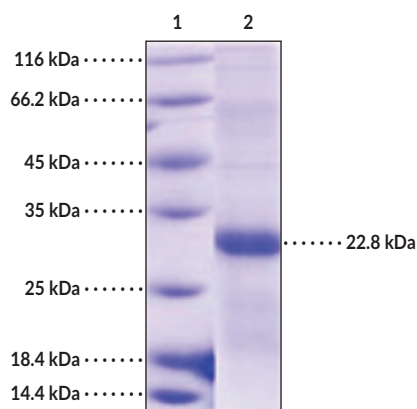
Item No. 40211

Overview and Properties

Synonyms: LT- β , TNF-C, TNFSF3, Tumor Necrosis Factor C, Tumor Necrosis Factor Ligand Superfamily Member 3
Source: Recombinant cynomolgus monkey N-terminal His-tagged LT- β expressed in insect cells
Amino Acids: 49-244
Uniprot No.: A0A2K5TTH5
Molecular Weight: 22.8 kDa
Storage: -80°C (as supplied)
Stability: ≥ 1 year
Purity: $\geq 90\%$ estimated by SDS-PAGE
Supplied in: Lyophilized from sterile 20 mM Tris, pH 7.4, with 500 mM sodium chloride
Endotoxin Testing: < 1.0 EU/ μ g, determined by the LAL endotoxin assay

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Image



Lane 1: MW Markers
Lane 2: Lymphotoxin- β

SDS-PAGE Analysis of Lymphotoxin- β . This protein has a calculated molecular weight of 22.8 kDa.

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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Description

Lymphotoxin- β (LT- β), also known as TNF-C, is a member of the TNF and TNF receptor (TNFR) cytokine superfamily.¹ It is a type II transmembrane protein that forms heterotrimers with TNF- β , also known as LT- α , which bind to the LT- β receptor (LT- β R).^{2,3} LT- β is expressed in T cells, natural killer (NK) cells, B cells, and innate lymphoid cells. Through activation of the LT- β R, LT- β is involved in the development and maintenance of secondary lymphoid organs, as well as the mucosal system, spleen, and bone marrow, host defense, and inflammatory processes.³⁻⁵ Knockout of *Ltb*, the gene encoding Lt- β in mice, decreases the number of splenic cytotoxic T lymphocytes and delays viral titer clearance compared with wild-type mice in a model of lymphocytic choriomeningitis virus (LCMV) infection.⁵ Levels of LT- β are increased in the colons of patients with chronic inflammatory bowel disease and in the tubercular lymph nodes of patients with granulomatous disease.⁶ Cayman's Lymphotoxin- β (cynomolgus monkey, recombinant) protein consists of 212 amino acids and has a calculated molecular weight of 22.8 kDa.

References

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2. Browning, J.L., Ngam-ek, A., Lawton, P., *et al.* Lymphotoxin β , a novel member of the TNF family that forms a heteromeric complex with lymphotoxin on the cell surface. *Cell* **72(6)**, 847-856 (1993).
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4. Gommerman, J.L. and Browning, J.L. Lymphotoxin/light, lymphoid microenvironments and autoimmune disease. *Nat. Rev. Immunol.* **3(8)**, 642-655 (2003).
5. Berger, D.P., Nanche, D., Crowley, M.T., *et al.* Lymphotoxin- β -deficient mice show defective antiviral immunity. *Virology* **260(1)**, 136-147 (1999).
6. Agyekum, S., Church, A., Sohail, M., *et al.* Expression of lymphotoxin-beta (LT- β) in chronic inflammatory conditions. *J. Pathol.* **199(1)**, 115-121 (2003).

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