

#### Source

Human Lymphotoxin alpha1/beta2 Protein, Fc Tag(LY2-H5263) is expressed from human 293 cells (HEK293). It contains AA Lys 62 - Leu 205 (alpha1) & Asp 82 - Gly 244 (beta2) (Accession # P01374 (alpha1) & Q06643 (beta2)). Predicted N-terminus: Pro

#### **Molecular Characterization**

This protein carries a human IgG1 Fc tag at the N-terminus.

The protein has a calculated MW of 78.3 kDa. The protein migrates as 65-95 kDa when calibrated against <u>Star Ribbon Pre-stained Protein Marker</u> under reducing (R) condition (SDS-PAGE) due to glycosylation.

#### **Endotoxin**

Less than 1.0 EU per µg by the LAL method.

# **Purity**

>90% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

#### **Formulation**

Lyophilized from  $0.22~\mu m$  filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

#### Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

### Storage

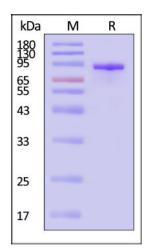
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

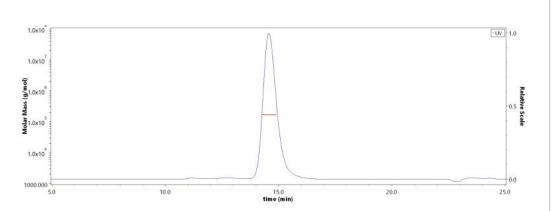
### **SDS-PAGE**



Human Lymphotoxin alpha1/beta2 Protein, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With <u>Star Ribbon Pre-stained Protein Marker</u>).

## **Bioactivity-ELISA**

### **SEC-MALS**



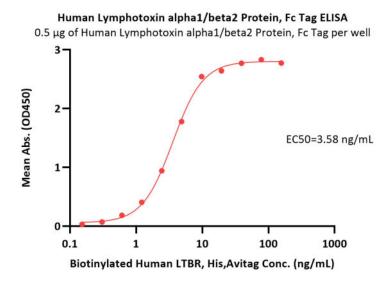
The purity of Human Lymphotoxin alpha1/beta2 Protein, Fc Tag (Cat. No. LY2-H5263) is more than 90% and the molecular weight of this protein is around 150-190 kDa verified by SEC-MALS.

Report

# Human Lymphotoxin alpha1/beta2 Protein, Fc Tag (MALS verified)







Immobilized Human Lymphotoxin alpha1/beta2 Protein, Fc Tag (Cat. No. LY2-H5263) at 5  $\mu$ g/mL (100  $\mu$ L/well) can bind Biotinylated Human LTBR, His,Avitag (Cat. No. LTR-H82E9) with a linear range of 0.1-10 ng/mL (QC tested).

# Background

Lymphotoxin alpha1/bate2 (LT α1/β1) are members of the tumor necrosis factor (TNF) superfamily, and plays a pivotal role in the establishment and regulation of the immune system. The predominant form on the lymphocyte surface is the lymphotoxin alpha 1/beta 2 complex (e.g. 1 molecule alpha/2 molecules beta) and this complex is the primary ligand for the lymphotoxin beta receptor (LTβR). The minor complex is lymphotoxin alpha 2/beta 1. Lymphotoxin alpha mediates a large variety of inflammatory, immunostimulatory, and antiviral responses, is involved in the formation of secondary lymphoid organs during development and plays a role in apoptosis. Genetic variations in this gene are associated with susceptibility to leprosy type 4, myocardial infarction, non-Hodgkin's lymphoma, and psoriatic arthritis. Lymphotoxin beta is an inducer of the inflammatory response system and involved in normal development of lymphoid tissue.

# **Clinical and Translational Updates**

