

**Synonym**

CD258 antigen,CD258,HVEM-L,LIGHT,LTg,TNFSF14,TR2,HVEML

**Source**

Human LIGHT Protein, Fc Tag (LIT-H5269) is expressed from human 293 cells (HEK293). It contains AA Asp 74 - Val 240 (Accession # [O43557-1](#)) trimer

Design.

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 82.6 kDa. The protein migrates as 116 kDa under non-reducing (NR) condition (SDS-PAGE) due to glycosylation.

**Endotoxin**

Less than 1.0 EU per  $\mu\text{g}$  by the LAL method.

**Purity**

>90% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

**Formulation**

Lyophilized from 0.22  $\mu\text{m}$  filtered solution in 50 mM Tris, 100 mM Glycine, 150 mM NaCl, pH7.5 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.*

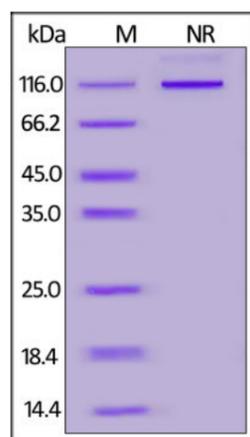
**Storage**

For long term storage, the product should be stored at lyophilized state at  $-20^{\circ}\text{C}$  or lower.

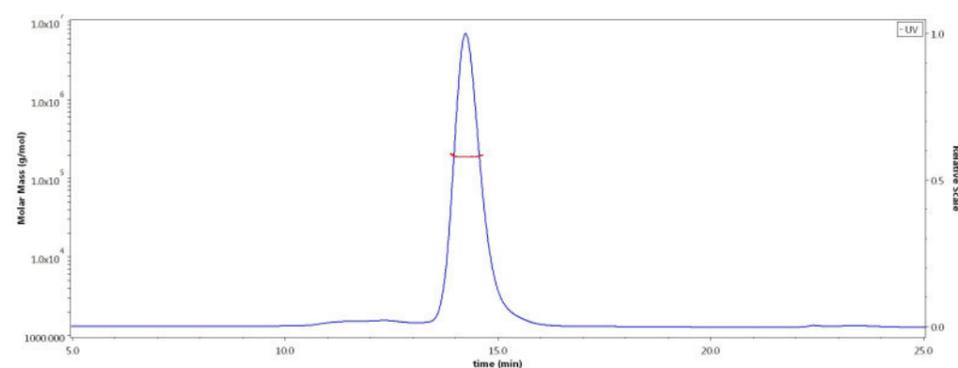
*Please avoid repeated freeze-thaw cycles.*

This product is stable after storage at:

- $-20^{\circ}\text{C}$  to  $-70^{\circ}\text{C}$  for 12 months in lyophilized state;
- $-70^{\circ}\text{C}$  for 3 months under sterile conditions after reconstitution.

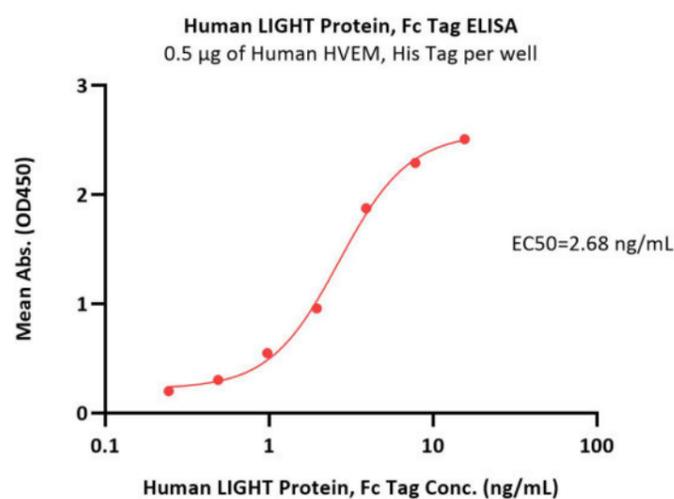
**SDS-PAGE**

Human LIGHT Protein, Fc Tag on SDS-PAGE under non-reducing (NR) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

**Bioactivity-ELISA****SEC-MALS**

The purity of Human LIGHT Protein, Fc Tag (Cat. No. LIT-H5269) is more than 90% and the molecular weight of this protein is around 180-200 kDa verified by SEC-MALS.

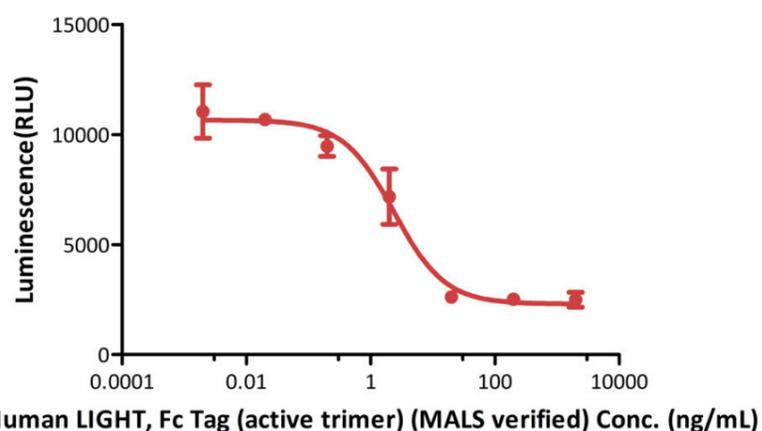
[Report](#)



Immobilized Human HVEM, His Tag (Cat. No. HVM-H52E9) at 5 µg/mL (100 µL/well) can bind Human LIGHT Protein, Fc Tag (Cat. No. LIT-H5269) with a linear range of 0.2-4 ng/mL (QC tested).

### Bioactivity-Bioactivity CELL BASE

#### Human LIGHT, Fc Tag (active trimer) (MALS verified) induced cytotoxicity in HT-29 cells



Human LIGHT Protein, Fc Tag (Cat. No. LIT-H5269) induced cytotoxicity in HT-29 cells. The ED50 for this effect is 1.29-2.38 ng/mL (Routinely tested).

### Background

Tumor necrosis factor ligand superfamily member 14(LIGHT) is a tumor necrosis factor (TNF) superfamily ligand that regulates T cell immune responses by signaling through the herpes virus entry mediator (HVEM) and the lymphotoxin beta receptor (LTbetaR). LIGHT has emerged as a potent initiator of T cell co-stimulation signals effecting CTL-mediated tumor rejection, allograft rejection and graft versus host disease. Constitutive expression of LIGHT leads to tissue destruction and autoimmune-like disease syndromes.

### Clinical and Translational Updates

Please contact us via [TechSupport@acrobiosystems.com](mailto:TechSupport@acrobiosystems.com) if you have any question on this product.