

Synonym

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

Source

Human LIGHT Protein, His Tag (LIT-H5242) is expressed from human 293 cells (HEK293). It contains AA Asp 74 - Val 240 (Accession # O43557-1) trimer Design.

Predicted N-terminus: His

Molecular Characterization

This protein carries a polyhistidine tag at the N-terminus

The protein has a calculated MW of 58.3 kDa. The protein migrates as 55-65 kDa under non-reducing (NR) 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.

Formulation

Lyophilized from 0.22 μm 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

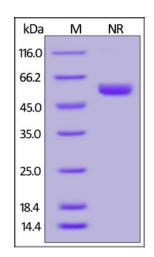
For long term storage, the product should be stored at lyophilized state at -20 $^{\circ}$ C or lower.

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.

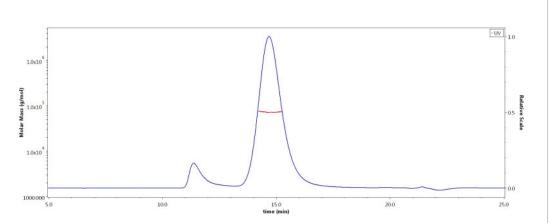
SDS-PAGE



Human LIGHT Protein, His 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

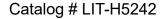
SEC-MALS



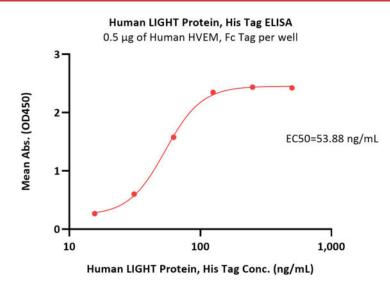
The purity of Human LIGHT Protein, His Tag (Cat. No. LIT-H5242) is more than 85% and the molecular weight of this protein is around 60-75 kDa verified by SEC-MALS.

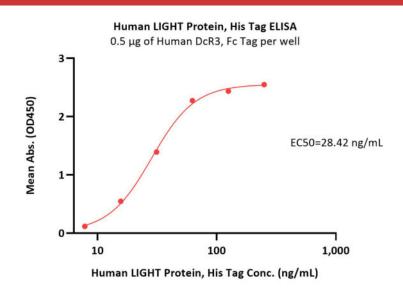
Report

Human LIGHT / TNFSF14 Protein, His Tag, active trimer (MALS verified)





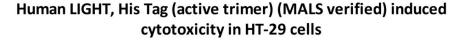


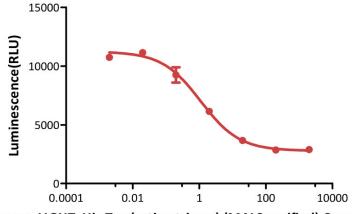


Immobilized Human HVEM, Fc Tag (Cat. No. HVM-H5258) at 5 μ g/mL (100 μ L/well) can bind Human LIGHT Protein, His Tag (Cat. No. LIT-H5242) with a linear range of 16-63 ng/mL (QC tested).

Immobilized Human DcR3, Fc Tag (Cat. No. TNB-H5255) at 5 μ g/mL (100 μ L/well) can bind Human LIGHT Protein, His Tag (Cat. No. LIT-H5242) with a linear range of 8-63 ng/mL (Routinely tested).

Bioactivity-Bioactivity CELL BASE





Human LIGHT, His Tag (active trimer) (MALS verified) Conc. (ng/mL)

Human LIGHT Protein, His Tag (Cat. No. LIT-H5242) induced cytotoxicity in HT-29 cells. The ED50 for this effect is 1.11-3.87 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 costimulation 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 <u>TechSupport@acrobiosystems.com</u> if you have any question on this product.